

1895.

- The Hard Lot of Certain Journalists. Feb. 16.
The Rewards of Shrewdness. June 29.
An Omitted Chapter in Political Economy. July 6.
The Stanford Millions. Oct. 26.
Capital for New States. Nov. 2.
A Study of Millionaires. Dec. 14.
An Incipient Mining Boom. Dec.

1896.

California Land Problems.

1. Why California is Lied About. Feb. 15.
 2. Miners Against Farmers. Feb. 29.
 3. Large Holdings. March 7.
 4. Large Holdings.—Causes and Remedies. March 14.
 5. The Economics of Irrigation. March 21.
- The General Agricultural Depression. May 30.
Wanted. A Unit of Brain Power. Aug. 22.
Automatic *vs.* Conscious Inflation of Currencies. Sept. 12.
Independence and Interdependence. Sept. 26.
Foresight. Oct. 17.

1897.

- Life Insurance and Longevity. Feb. 6.
A Dream of Successful Railroading. Feb. 13.
Business and War. May 29.
Religion, Politics and Industry. April 10.
Up to Date Morals. July 3.

DATE UNKNOWN.

- Labor Agitators and Professional Economists.
Limited Liability at Home and Abroad.
Charity Work for the Unemployed.

THE
FOREIGN COMMERCE OF JAPAN
SINCE THE RESTORATION
1869-1900

Digitized by the Internet Archive
in 2007 with funding from
Microsoft Corporation

SERIES XXII

Nos. 9-10

JOHNS HOPKINS UNIVERSITY STUDIES
IN
HISTORICAL AND POLITICAL SCIENCE
(Edited by H. B. Adams, 1882-1901)

J. M. VINCENT
J. H. HOLLANDER W. W. WILLOUGHBY
Editors

THE
FOREIGN COMMERCE OF JAPAN
SINCE THE RESTORATION
1869-1900

BY
YUKIMASA HATTORI

BALTIMORE
THE JOHNS HOPKINS PRESS
PUBLISHED MONTHLY
September-October, 1904

THE FRIEDENWALD CO., PRINTERS,
BALTIMORE, MD., U. S. A.

CONTENTS.

	PAGE
CHAPTER I. THE VOLUME OF TRADE.	
1. General Features	7
2. Development	11
a. First Period (1868-1886).	
b. Second Period (1887-1900).	
3. Balance of Trade.....	24
CHAPTER II. THE CHARACTER OF JAPAN'S COMMERCE.	
1. Exports	34
a. Agricultural Products.	
b. Mineral Products.	
c. Textile Manufactures.	
d. Other Manufactures.	
e. Marine Products.	
2. Imports	60
a. Textile Manufactures.	
b. Mineral Products.	
c. Agricultural Products.	
CHAPTER III. THE GEOGRAPHICAL DISTRIBUTION OF TRADE.	
1. Change in Distribution	70
2. Present Situation	74
3. Conclusion	77

NOTE.

The author wishes to acknowledge his great obligation to Dr. Jacob H. Hollander, Professor of Political Economy in the Johns Hopkins University, to whose kind supervision, valuable suggestions and constant encouragement this essay owes its origin and completion.

THE FOREIGN COMMERCE OF JAPAN SINCE THE RESTORATION, 1869-1900.

CHAPTER I.

THE VOLUME OF TRADE.

GENERAL FEATURES.

The world has now to deal with a new factor. Some fifty years ago, when Commodore Perry's fleet anchored in the Bay of Uraga, Japan was a hermit nation, more than five centuries behind the times,¹ a country split up into two hundred and seventy Dimiates or provinces, each politically as well as economically independent. To-day the same Japan is the "Land of the Rising Sun," with a thriving population and great resources, boldly and surely looming above the political and economic horizon of the Far East. The great movement which culminated in the restoration of imperial authority in 1868 has completely broken down the bars between Japan and the world at large. Not by slow evolution, but by one convulsive effort, the space dividing feudalism from constitutional government, and handicraft and serfdom from the commercial and industrial liberty of modern life has been bridged over.

These incredible changes, however, would never have been accomplished within a few decades had it not been for free

¹ "Although we find some closer resemblances between the state of Europe and Japan in the thirteenth and fourteenth centuries than at any earlier period, we must go back still further to find some of the most striking of these coincidences or similitudes—to the early Saxon and Norman periods in England, and to the first Merovingian era of kingly rule in France, from the fifth to the eighth centuries."—Quarterly Review, vol. cxxxvii, p. 195.

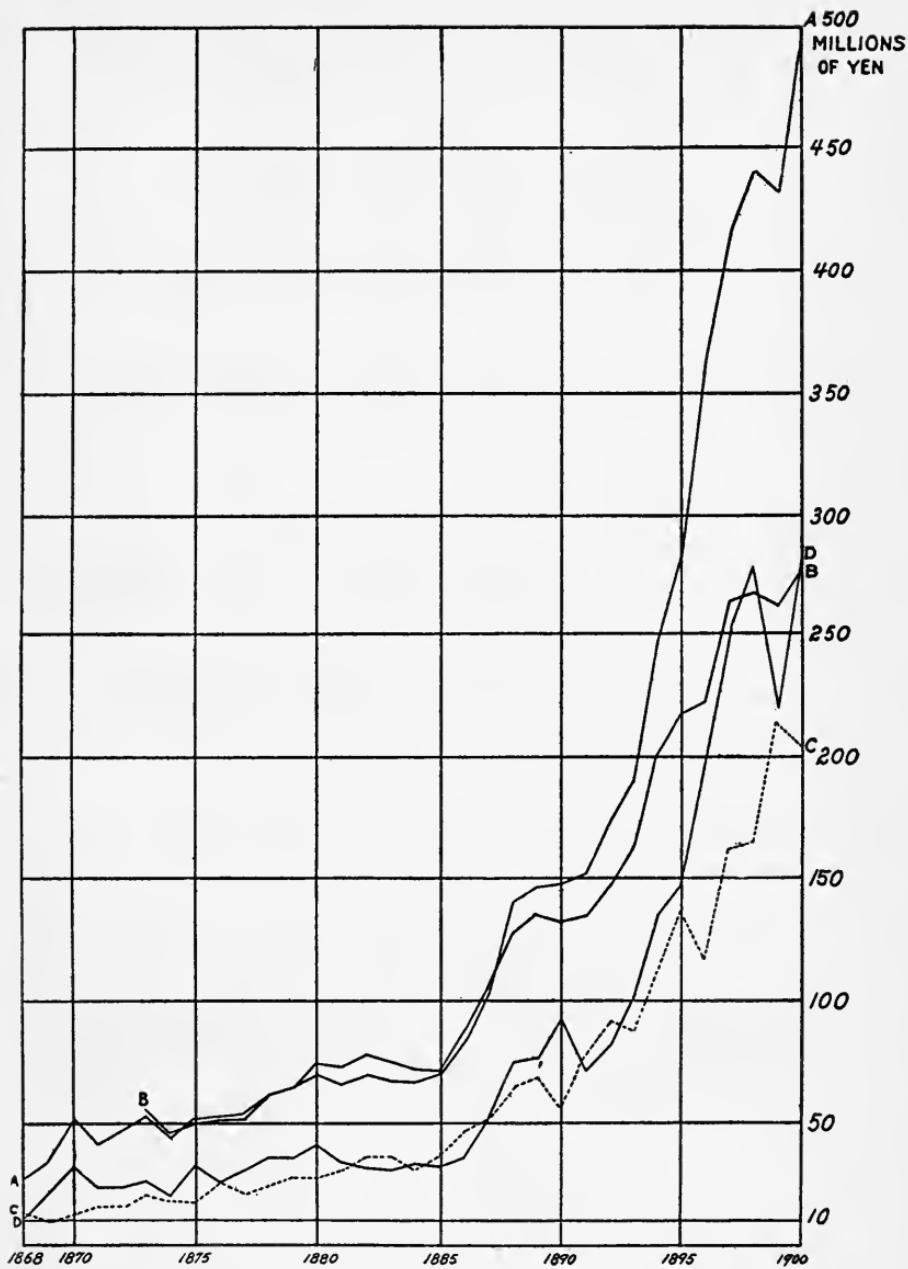
and eager communication with the Western nations. Foreign commerce has been, indeed, at once an instrument and a measure. As a force of civilization it has furnished means of production and consumption. As a measure it has afforded a fair barometer of national progress, for in no particular is the general economic advance of Japan more distinctly reflected than in the growth of her foreign commerce.

The total value of Japan's exports and imports in 1868 was 27,000,000 yen; ² 70,000,000 in 1880; 149,000,000 in 1890; and from that year on, the aggregate increased by leaps and bounds, notably after the Chino-Japanese war of 1894-1895, until, in 1900, it reached the enormous sum of 491,000,000 yen.

Stated in terms of yen this increase appears greater than it really is. Since 1873, the value of silver has gradually decreased, not only relatively to gold, but to all commodities; or, in other words, general prices have in 1900 risen about 78 per cent, so that the figures just stated must be reduced according to the index number of prices in each particular year in order to show the actual quantity or volume of commodities.³ The subject may be approached from another side, viz.: by taking the tonnage of merchant marine entered at the Japanese ports from foreign countries. Then we get the following figures:

² Prior to 1898, the value of imported goods was the actual cost at the place of purchase, so that an addition of 15 per cent must be made to the import figures of each year to cover freight, insurance, and other charges, incurred up to the time of their arrival at the destination, in order to make an approximately correct estimate of the cost of imported goods to Japan.

³ See Diagram I (page 9). The index number previous to the year 1873 is unavailable; that for the years 1873-1894 is quoted from the report of the Monetary Reform Committee, and the rest has been calculated by the editors of the Tokio Economic Magazine from the reports of the Bank of Japan, by the same method of formulating a so-called tabular or multiple standard as the committee had used. See Tokio Economic Magazine, vol. xliv, No. 1076.



JAPAN'S FOREIGN TRADE SINCE THE RESTORATION.

A.—Total value of exports and imports. B.—Total quantity of exports and imports. C.—Value of exports. D.—Value of imports.

FOREIGN TRADE OF JAPAN.

Year.	Value. (Millions of yen).	Quantity.	Tonnage. (Thousands of tons).
1873	53	56	566
1880	70	75	691
1890	149	133	1,654
1899	434	262	3,608
Percentage of increase, 719		368	537

Such a wide divergence precludes the possibility of arriving at an accurate estimate of the development of the foreign commerce. Yet three things are certain from the above figures: first, that the money value given is by no means reliable; second, that the most reliable estimate of increase may be made from the quantity and tonnage; and third, that Japan's commerce entered upon a new phase in the year 1890, or thereabouts.

In the meantime, the population has increased from 33,000,000 in 1872 (an actual and careful enumeration having been made in that year for the first time) to 44,000,000 in 1900, an increase of over 33 per cent in twenty-nine years. Hence the total amount must again be reduced according to the census of each particular year if we are to estimate comparatively the importance of Japan's foreign commerce. When this is done, both the per capita value and the total volume are seen to be small. Indeed, when compared with that of other nations, the insignificance of Japan's export trade is evident. The following table will furnish some rough idea:

EXPORTS OF DOMESTIC PRODUCE IN 1897.

	Total.	Per Capita.
Japan	\$80,000,000	\$1.88
United Kingdom.....	1,170,000,000	29.25
France	719,000,000	18.43
Germany	890,000,000	17.11
United States.....	1,032,000,000	14.74

There are still other data necessary before the growing importance of Japan's foreign commerce can accurately be estimated. We must know the total amount of domestic trade, so as to make a comparison of the quantity and pro-

portion of national wealth employed in both branches of commerce. Unfortunately, no statistical information is obtainable on this point. No official census of Japan's national wealth has as yet been attempted. But happily we are furnished with somewhat trustworthy estimates by Mr. Yoshio Kusaka,⁴ who, after careful and elaborate calculation, has come to the conclusion that Japan's national wealth amounts to 15,093,000,000 yen, the items in which are as follows:

	Yen.
Land	10,000,000,000
Live Stock.....	75,000,000
Buildings	1,919,000,000
Furniture and works of art.....	788,000,000
Railways, telegraphs, aqueducts.....	90,000,000
Shipping	98,000,000
Mines	405,000,000
Marine products.....	272,000,000
Capital (paid up) of banking companies.....	242,000,000
Specie and bullion.....	176,000,000
Miscellaneous	<u>1,028,000,000</u>
Total	15,093,000,000

It will be observed that this sum is a little more than one-seventh of the accumulated wealth of the United Kingdom, and a little less than one-twelfth of that of the United States. Though a comparison of the wealth of the two nations wholly in terms of money is necessarily misleading, the above calculation serves a purpose in illustrating the predominance of landed capital and the direction given to the labor and energy of the people.

DEVELOPMENT.

The history of Japan's foreign commerce naturally falls into two periods: the first embraces the years 1868-1886, and the second the years from 1887 to the present time. Several reasons suggest this division. First, because in 1886 the resumption of specie payments was effected, and the paper notes, which had been depreciated

⁴For a criticism of these figures, see "U. S. Monthly Reports of Commerce and Finance," December, 1901, p. 2302.

for a considerable number of years, were brought to par with silver. The evils connected with fiat paper money were ended, and with restored confidence in the stability of the medium of exchange, commerce and industry entered upon a new and vigorous life. Second, up to this time Japan's foreign commerce had made little progress, owing to the disorganization and reorganization of internal affairs incident to the wholesale introduction of Western institutions. Third, from 1887 the foreign commerce had not only entered upon a period of remarkable development which commanded world-wide attention, but had also begun to change its character and geographical distribution.

First Period (1868-1886).—After the reluctant opening of the Empire to the new commerce, a decade elapsed before the Imperial authority was restored to its former glory, and Japan became fully convinced of the superiority of Western civilization and of the advantages of maintaining commercial relations with foreign countries. In spite of anti-foreign agitation, commercial treaties were concluded with eleven countries during these ten years, and foreign trade attained considerable proportions. Though in some respects important, the period was only introductory to the new era of Japan's foreign commerce, which may properly be said to have begun with the year 1868, that date being also a landmark in the political and social history of the nation. Passing, therefore, from the early conditions of trade, let us begin with the opening of the new era, in many respects so significant.

One of the most important elements in the growth of Japan's foreign commerce is indicated in the oath taken by the Emperor on April 6, 1868, when His Majesty, surrounded by the leaders of the revolution, was congratulated on the happy restoration of Imperial authority. It declared as follows: "The uncivilized customs of former times shall be broken through Intellect and learning shall be sought for throughout the world to establish the foundation of the Empire." Nothing will perhaps better illustrate the

spirit of the times than this terse sentence, by which the long-established social and political institutions were condemned.

Incredible as was the rapidity with which the transition was accomplished, several years necessarily elapsed before the nation's material conditions improved sufficiently to exercise a perceptible influence upon the development of foreign commerce. Administration was centralized, security of life and property established, taxation unified and reduced, and communication facilitated; but, industrially, the Japan of this period was essentially feudal, that is to say, in that stage of production which had prevailed in Europe before the epoch of the so-called "industrial revolution." "When reference is made to the Japanese nation," says Captain Brinkly, "in connection with the radical changes of 1868, it must be observed that only the nobles and the samurai (military class) are indicated, in other words, a section of the people representing about one-sixteenth of the whole. The bulk of the people, the agricultural, the industrial and the mercantile classes, remained outside of the sphere of politics, not taking any serious interest in the great questions of the time."⁵

In speaking, however, of the backward state of affairs in Japan at the time of the opening of the new commerce, attention must be called to the fact that in material civilization, especially in the field of artistic works, Japan was highly developed and even surpassed in some particulars the nations of the West. Japanese silk embroidery, lacquer ware, paper, ceramic and bronze works were unrivalled, and a wonder and envy to Staffordshire artisans and Parisian artists. Secluded from the rest of the world, Japan had developed an economic system. In each province there was in existence a system of self-supply, and the division of labor, however limited by the extent of the market, had been fully developed in detail.

⁵ "Japan," in "Encyclopædia Britannica."

It was perhaps in consequence of this peculiar character of the industrial status of the country, so knitted together for centuries by the mutual exchange of commodities, that the opening of new opportunities and new channels of trade wrought for a time nothing but industrial chaos and universal calamity. Suddenly brought face to face with Western civilization, there arose naturally a popular craze for everything European and American, both for those commodities which are merely articles of luxury, and for those which are the necessities of life—such as matches, lamps, hats, shoes and umbrellas. "It is in this respect," says Count Okuma,⁶ "as if a new class of consumers, with widely different tastes, had suddenly been called into existence among the old class of manufacturers, asking for things which the manufacturers knew nothing of and which therefore they could not supply. A vast number of occupations which had hitherto been thriving had suddenly to be abandoned, and skilled laborers and artisans were thrown out of employment in thousands. Moreover, all kinds of monopolies and business privileges, which the Daimios granted to their favorite merchants and to themselves, had ceased to exist with the fall of feudalism. The consequence was that the greater portion of the industrial world was paralyzed completely."

The economic situation of the country at that time was deplorable. Compelled by force of circumstances, either knowingly or unknowingly, Japan entered into treaty relations with the West under conditions not only perilous to the material welfare of the country, but even subversive of her sovereign authority as an independent state.⁷ By the tariff convention of 1866, the whole schedule of duties was revised and rates fixed on the average at five per cent on all commodities exported from and imported into Japan.⁸ The

⁶ "The Industrial Revolution of Japan," in *North American Review*, vol. 171.

⁷ See E. H. House's articles, "The Tariff in Japan" and "Foreign Jurisprudence in Japan," in *New Princeton Review*, vol. v.

⁸ According to this revised tariff, all articles of imports were divided into four classes: (1) those which paid specific duty (so low as to

Japanese government was "desirous of affording a fresh proof of its wish to promote trade and to cement the friendly relations which exist between their country and foreign nations."⁹ Having thus surrendered, or rather been deprived of its tariff autonomy, the nation found itself helpless to protect its industries against the competition of Western skill and capital. The wares of Birmingham and Manchester superseded domestic manufactures, especially in the line of textile goods, and many important industries were deranged to an irreparable extent. Keenly alive to the situation, the Japanese government repeatedly petitioned the Powers for the removal of the onerous and humiliating provisions of the treaties, but always in vain.¹⁰

Although excited popular feeling would hardly have regarded it so at that time, the pressure of foreign competition operated as a stimulus to the rapid modification of Japan's industries and laid the foundation for the later growth of her foreign commerce. During this period of transition, when Japan was seeking the new ideas and life of the Western civilization, nothing would have been more hurtful to the country than a policy of protectionism against the free importation of foreign commodities. By the development of a new, free, active and enlarged spirit and by the expansion of popular wants, the industries of the country were given not only an immense stimulus, but an impulse towards diversification. The inauguration of new industries was

be less than five per cent on an average), comprising nearly all the manufactured commodities; (2) free goods, which included coins, bullion, personal property not intended for sale, and a few other articles; (3) prohibited goods, viz., opium; (4) goods subject to an *ad valorem* duty of five per cent on the original valuation at the place of purchase. A table of tariffs on exports was classified in precisely the same manner. For the full text, see "Treaties and Conventions between the United States of America and other Powers," p. 525.

⁹ Nitobe, "Intercourse between the U. S. and Japan," p. 90.

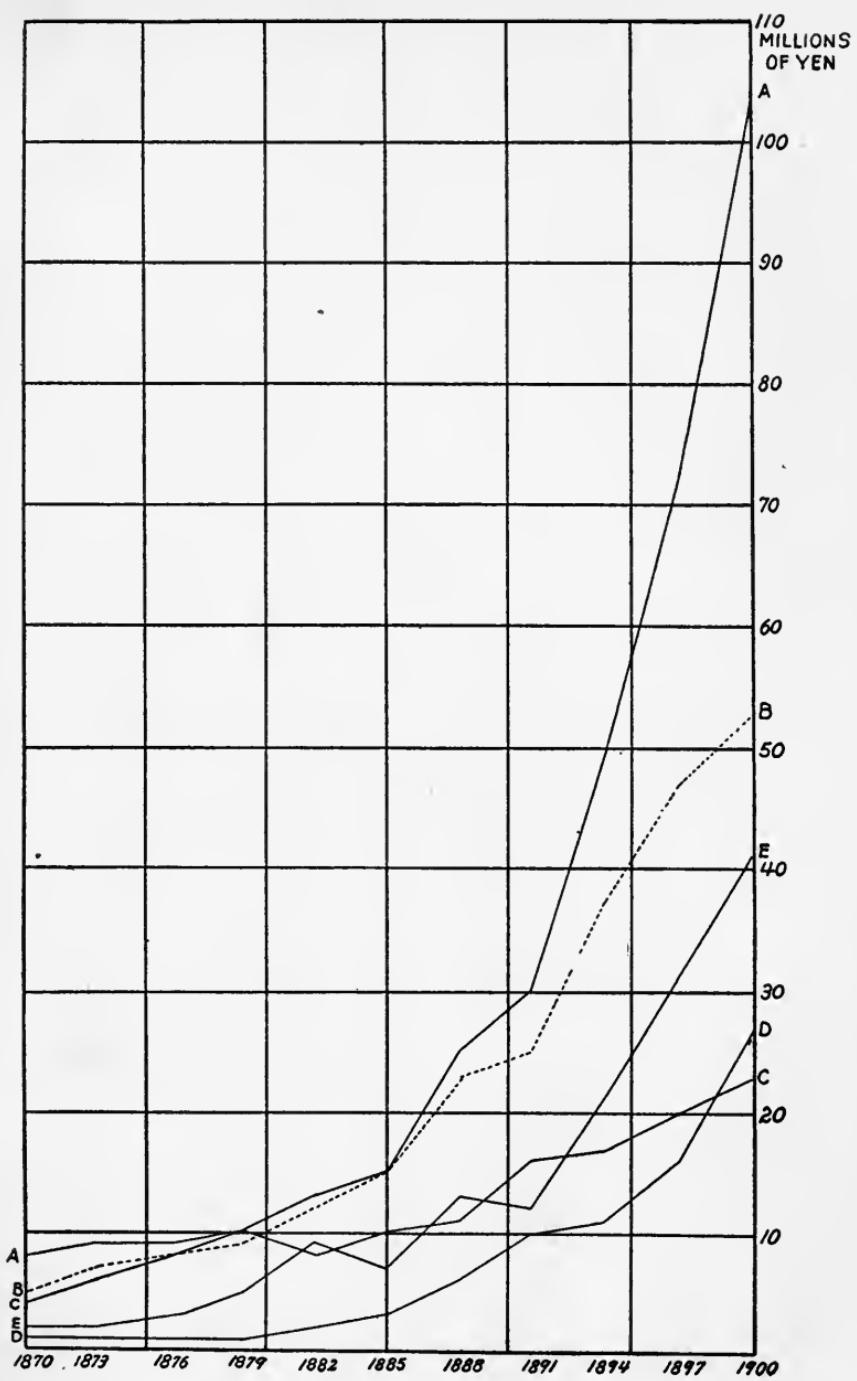
¹⁰ A clause of the treaty provided that the tariff of 1866 should be subject to revision on July 1, 1872; and the imperial embassy of 1871 had that in view. After 1881 tariff revision became one of the most engrossing questions of practical politics in Japan.

rendered difficult by the entire ignorance on the part of the people of modern methods of production. It, therefore, became the policy of the government for some years to present a series of object lessons. The scattered capital of the country was gathered up in the national banks, and loans were made on liberal terms in order to encourage private enterprises. The government also influenced, for the purpose of facilitating foreign trade, the establishment of the Yokohama Specie Bank in 1879, which soon founded its branch offices in New York (1880), Liverpool (1882), London (1884), San Francisco (1886), Shanghai (1893), and Tientsin (1899).

The commercial development of a nation demands that internal transportation facilities shall first be improved. With the inauguration of reforms in 1868, the Japanese government employed an army of foreign experts in the construction of light-houses, docks and ship-yards, telegraphs, railways, posts, and in the improvement and reorganization of the various kinds of industrial works.¹¹ The government also established, under its direct supervision and control, factories of many kinds, such as silk, cotton, wool and paper mills, and made a hundred other improvements which seemed likely to enrich the country, and to bear good fruit on the soil of Japan. It was a period of transplantation of Western institutions—social, industrial and political—designed to fit Japan for entry into the comity of nations. The result was that between the years 1881 and 1885, private enterprises finally started upon a career of independent activity, and many corporations came into existence.

Second Period (1887-1900).—A glance at the foregoing diagram (page 9) suggests the rapidity with which the foreign commerce of Japan increased during the period now

¹¹ “British experts organized the navy and equipped the Osaka mint; Frenchmen reorganized the army, codified the law and built the Yokosuga dock-yard; Germans have directed the higher medical education of the country, and the reform of the entire educational system was chiefly the work of a handful of Americans.”—Griffis, “The Mikado’s Empire,” p. 620.



EXPORTS.

(TAKEN ON AN AVERAGE OF THREE YEARS.)

A,—Textiles (including raw silk). B.—Raw silk. C.—Foodstuffs, D,—Minerals, E.—Others.

under consideration. Together with this increase of quantity, the character of the trade underwent important change. In tracing this closely, we find great increases in the exports of three distinct kinds of goods: first, the natural products which are most suited to the soil of Japan, such as raw silk, coal and copper; second, textile manufactures, consisting chiefly of cotton yarn, habutayo (white silk fabrics), and silk handkerchiefs; and third, matches, straw-blades and floor-matting. Nearly all the articles, however, which are included under the second and third heads and which now form the most important exports, first appeared in the foreign trade of Japan almost simultaneously in 1890. For example, in 1890 the exports of cotton yarn amounted to only 2,000 yen and of habutayo to 818,000 yen; in 1900, the corresponding figures were 20,589,000 and 18,314,000 yen, respectively. In other words, up to 1890 the foreign exports of Japan were merely the outflow of the surplus produce of the country, and consisted chiefly of raw silk and tea. But thereafter many new industries were called into existence by the annual increase in foreign demand, and the export of manufactured goods has gradually risen until it far exceeds that of raw materials.

The order of this development is not difficult to trace. There are, roughly speaking, three stages through which the foreign commerce of Japan has passed: (1) The increase in the exports of natural products. Under this head there are four principal products, viz.: raw silk, coal, copper and tea, although the export of the last-named article has made little progress during the period under review. First of all, public attention was naturally paid to the extension of silk culture, which had become exceedingly lucrative through the enhancement of the price, due to the fall in the exchange rate in silver, and to the increase of foreign demand. The expansion of this industry is a remarkable incident, and detailed consideration will be given thereto in its proper place. Although the extractive industries are old in origin, the use of modern mining appliances in Japan is quite recent

and an incident of the general industrial activity. When the advantages of joint capital were realized, and private corporations were organized, a great part of the capital thus gathered was naturally invested where the field was most inviting, viz.: in the opening of coal mines and the building of railways. This may explain why the export of coal and copper has increased with such rapidity.

(2) Increase in the export of textile manufactures. These manufactures fall into two main categories of cotton and silk fabrics. The export of silk goods is naturally the first step on account of the abundance of raw material. So far, however, Japan has made progress in silk manufactures only in two articles, viz.: habutayo and silk handkerchiefs, the making of which requires but little skill. Remarkable as is the rapidity with which the export of these two articles has increased during the last decade, the industry is still in an incipient stage, localized in one district in the northwestern part of the island. The second period of development is clearly illustrated by the recent sudden increase in the exportation of cotton yarns. Here Japan has made a new departure and has successfully competed with English and Indian yarns in the neutral markets of continental Asia. It is in the spinning industry that modern machinery has been introduced on a large scale, owing, no doubt, to the great difference in the comparative cost of hand and machine production. This new departure, however, is not wholly accidental. There is a certain economic order which Japan is naturally following in her industrial development, and each stage of transition is successively reflected in the character of foreign trade.

(3) This order or sequence becomes more marked when we examine closely the export statistics of those articles which we have included under the third head, such as matches, straw-blades, floor-matting, European umbrellas, hats, clocks, etc. With the exception of straw-blades and floor-matting, all the articles were at one time important items in Japan's imports, and their appearance on the export side of the customs returns clearly marks a transition.

The spirit of enterprise has extended from one industry to another, and the territorial division of labor has gradually led to the production of that for which Japan is most suited. Foreign demand and tastes, relative power and population have gradually become known or have been carefully studied. In this process, many industries decayed; but many new enterprises have grown on the ruins of old things. Many towns lost their trade, but new cities, such as Yokohama and Kobe, sprang up from mere hamlets, the very face of the country having been remodelled to such an extent that there is hardly any visible trace of the old feudal boundaries except in the survival of a few large castles.

At this point it will be convenient to summarize the effects of foreign commerce and to show in what order Japan has hitherto developed her trade and industries. Such an inquiry will throw light upon the present commercial and industrial status of the country and will enable us to foresee in what direction the foreign commerce of Japan is likely to develop. Five principal lines of consideration may be suggested:

1. Public attention was naturally given, in the first instance, to securing the nation cheap means of communication. Hence, a large part of the capital invested took the form of expenditures for railways, steamships and the like.

2. The extension of railways made it possible for each locality to specialize its industry, and the export of natural products was steadily increased.

3. The creation of new demands among the people and changes in their habits and tastes led to a modification in the nature of Japan's industries. The imitation of foreign commodities was first attempted in simple lines of manufacture which did not need much skill nor expensive machinery, such as matches, umbrellas and fancy articles for the toilet. Not only have such foreign manufactures been completely driven from the home market, but in certain lines Japan has already entered into active competition with foreign countries in neutral markets.

4. The most marked advance has been made in the manufacture of cotton yarns; but it is only in spinning and in a few other processes that Japan has emerged from the domestic stage of production into the modern system of the factory. Highly organized machinery can only be introduced where capable labor exists and when a market has been prepared for large quantities of goods. Hence, this form of industry was started only when transportation had been facilitated and the supply of coal became abundant. Japan's command of skilled labor is small, but it is now universally recognized that in deftness and delicacy of touch Japanese operatives are without rivals. These qualities are highly useful in the textile industries.

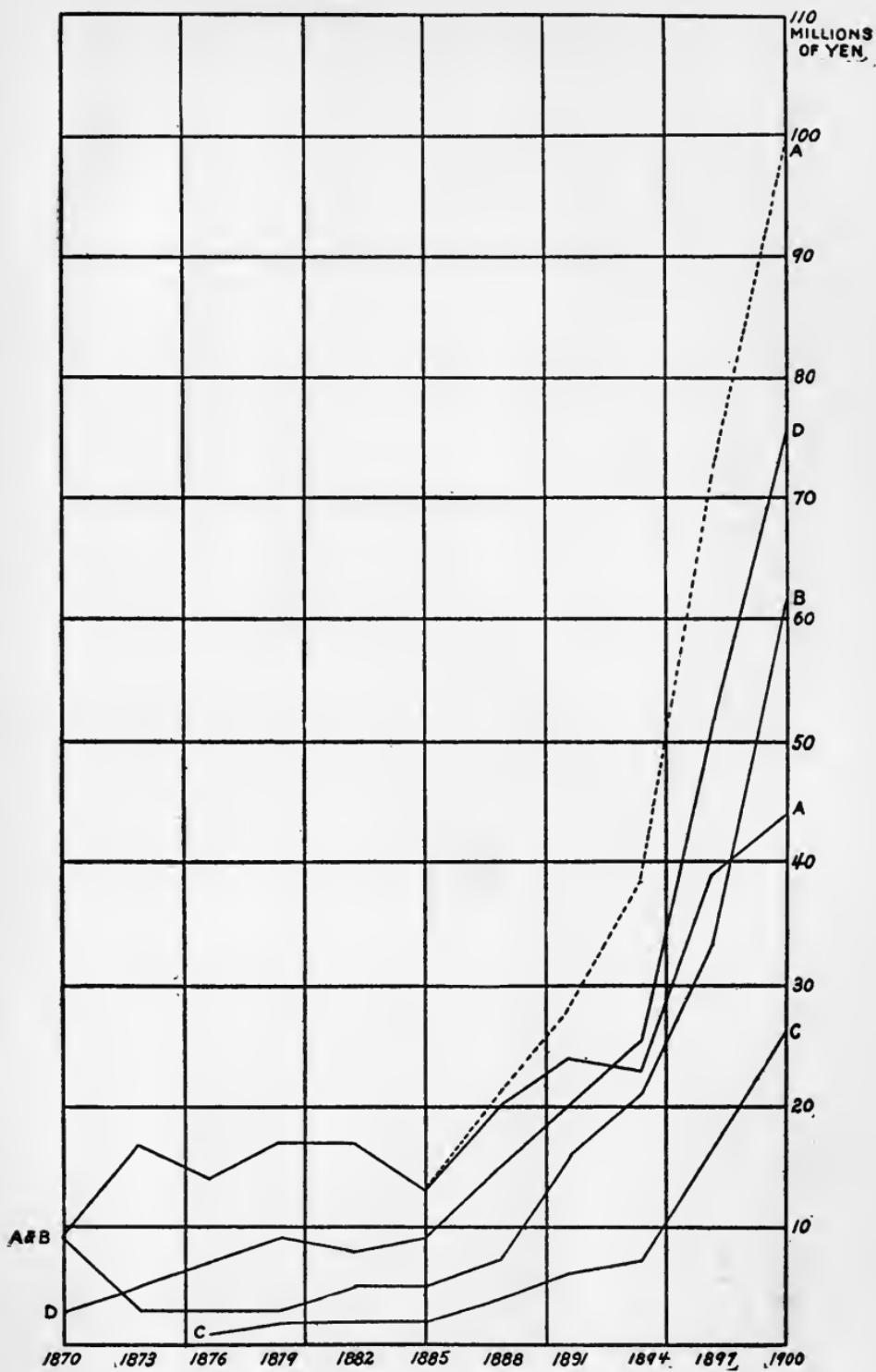
5. A distinction, however, must be made between the artistic sense of the Japanese and the mechanical skill of the Western people. Wherever exactness and uniformity are demanded in wares, the Japanese have so far proved a failure. The common sense, energy and skill of the Western workman are as much the products of generations as is the ingenuity of the Japanese. As Japan is still dependent for the supply of nearly every kind of structural iron and machinery upon foreign countries, the solid basis for the nation's material progress is lacking, and it will necessarily take a considerable length of time to overcome mechanical difficulties and to acquire a thorough skill in Western methods of production.

With such results at hand, however, there is no doubt that Japan has a great future as a manufacturing country. This tendency becomes more manifest when we examine the recent change in the character of Japan's imports. During the period of which we are speaking the importation of food stuffs, raw materials, such as cotton, wool, etc., and of the various kinds of machinery has steadily increased. On account of the limited area of land, the nation will necessarily be compelled to strive for manufacturing pre-eminence. Just how far this process has advanced will best be

illustrated by the change in the distribution of the population.

In 1886, the total number of people living in cities of over 20,000 inhabitants was 3,524,000, or nine per cent of the entire population. In 1898, the number of city dwellers had nearly doubled, amounting to 6,018,000, and when compared with the whole, it constituted thirteen per cent. When we remember that in England over sixty per cent of the people are found in cities, the low industrial development of Japan is evident. The people are scattered over the country in small groups, and the domestic system of production is still dominant. But this change in the distribution of the population may be taken as an indication of how far industry has been concentrated in large establishments.

All these changes are strikingly similar to what took place in England a century ago when the era of the so-called "industrial revolution" was ushered in. England's expansion may be summed up in three words: inventions, foreign trade, and division of labor. In the main, Japan is following the same course of development. At first, Japan exported natural products, such as raw silk and tea, and took her payment in machinery to a greater extent than was needed for home consumption, leading to the extension of her foreign trade. This was particularly true of such commodities as raw silk, cotton yarn, coal, copper and matches. The trade of Japan is still at this stage. The industrial processes are not as yet so much diversified or specialized. If the foreign market be much more expanded and if mechanical difficulties be overcome, the division and sub-division of labor will proceed from one industry to another, and labor will be diverted from agriculture to manufactures. These in their reaction will lead to still further extension of markets. Thus, in the progress of trade itself, we find an almost boundless field for the employment of labor and capital, bringing within reach such comforts and luxuries as had no existence before and tending to make life in Japan nobler and happier.



IMPORTS.

(TAKEN ON AN AVERAGE OF THREE YEARS.)

- A.—Textiles.
- B.—Foodstuffs.
- C.—Minerals (petroleum not included.)
- D.—Others.

THE BALANCE OF TRADE.

A large excess of imports over exports has been a prominent feature of Japan's trade since the late war (1894-95), reaching its climax in 1900 with a serious balance of 82,000,-000 yen against Japan. This has naturally enough given rise to apprehension lest the country might be impoverished, and has revived much discussion on a time-worn topic associated with the mercantile school of economists of the seventeenth and eighteenth centuries.

A glance at the foregoing diagram (page 9) is suggestive and appeals strongly to the popular belief that the balance of trade has been persistently "unfavorable," with the exception of a few years between 1882 and 1887 and the two years 1891 and 1892. It is generally taken for granted that this heavily adverse condition of trade from 1869 to 1881 was due to the depreciation of the government's fiat notes and the consequent rise of prices. The inflation of paper currency, it is true, drove the specie, most of which was gold, out of the country in this period. The coinage of the mint fell off rapidly. The efflux of specie, which had never exceeded 2,000,000 yen¹² in previous years, suddenly increased to the tremendous sum of 13,000,000 yen in 1874, and in the following year to 14,000,000 yen. After an interval of only one year the outflow once more began, only stopping finally in 1881. It is, however, hardly true that the enhanced prices in convertible paper money tended to increase imports, since foreigners did not exchange commodities for the depreciated paper, but received payment in silver. Although prices rose rapidly, examination reveals the fact that the prices of most imported commodities did not rise to any appreciable extent,¹³ owing to the general fall of prices in Europe and America in progress since

¹² The official returns relating to the movement of the specie became available for the first time in 1872. The above mentioned figures are the differences between the exports and imports of specie and bullion.

¹³ "Report on the Adoption of the Gold Standard in Japan."

1873 and at one time ascribed to the demonetization of silver, or to the appreciation of gold, but now recognized as the resultant of many diverse forces growing out of the general application of steam and electricity to nearly every part of productive and distributive economy. Hence, it seems that the great inflow of foreign commodities during this period was due not so much to the enhancement of prices, but rather to "the impulse towards progress which animated the whole nation, and partly to that fondness of human nature for novelties, which manifests itself as well in New Yorkers and Parisians as in American Indians and Fiji Islanders."¹⁴

The second period of unfavorable balance began soon after the war closed in 1895. Stimulated by the victories over the Chinese, the Japanese government drew up plans for becoming a strong military power and a great commercial country. In furtherance of these objects, the government made a large, if not lavish, outlay for national defense, an increased armament, the development of manufacturing industries, the extension of railway and telephone service, and the encouragement of foreign trade and navigation.¹⁵ For the many public works projected, however, the vast sum of the war indemnity—38,000,000 pounds—paid by China proved insufficient, and many millions were diverted from customary channels of trade to these undertakings. A large part of this sum, together with large domestic loans and foreign loans floated in the London market, found its way into the pockets of the laboring classes. Such an unusual abundance of money naturally induced extravagant modes of living. The spread of luxury even in the villages far in the interior is nothing short of surprising. The simplicity of life of the Japanese farmer and artisan has vanished. The luxuries of past years are now necessities.

¹⁴ Okuma, "Industrial Revolution of Japan," in *North American Review*, vol. 171, 1900.

¹⁵ For details, see Count Matsukata's "Report on the Post-Bellum Financial Administration in Japan."

An example of this is the sudden and large importation of sugar, which has trebled during the last decade. The general increase of purchasing power among the mass of the people has been a potent factor in causing the heavily adverse balance of trade.¹⁶

Another factor has been the enhancement of prices. The index number of prices has advanced constantly and rapidly from 113 in 1890¹⁷ to 131 in 1895, and within five years after the war to the startling figure of 178 in 1900. There is no doubt that since the current of foreign trade is largely regulated by prices, such a sudden rise in prices has acted as an incentive to large importations. Upon examining closely the constituent elements we find that the increase was mainly in the lines of raw material, such as wool and cotton; machinery, such as electro-dYNAMOS, and the various kinds of iron works for railway and bridge construction. The truth is that Japan in this period began, for the first time, to enter fully upon a career of so-called capitalistic production under the modern factory system. The moral effects of the victory were such that the whole nation seemed for a time to have been swept into commercial and industrial mania. Various kinds of companies, factories and institutions were organized and started.¹⁸ In 1895, the total paid-up capital of all the banks and the commercial and industrial companies was 537,000,000 yen; at the end of 1899 it amounted to 1,756,000,000 yen, an increase of over 227 per cent within four years. The capital thus invested was spent largely in the purchase of apparatus, tools and machinery. The fixed capital began to be an abnormally large part of the total wealth and resources of the country.

For a time things went on well. But in the second half of the year 1897, the tendency to an excess of imports over exports and a consequent drain of specie became alarming and was intensified in the following year by a furious rush

¹⁶ "U. S. Consular Reports," June and August, 1901; March, 1902.

¹⁷ The year 1878 is taken as the basis for calculation.

¹⁸ "U. S. Consular Reports," No. 250, 1901.

for the importation of goods, consequent upon a change from the five per cent conventional tariff¹⁹ to a new statutory tariff²⁰ which became operative on January 1, 1899. The subsequent stringency of the money market on account of the scarcity of working capital was keenly felt and many undertakings were either wholly or partially abandoned and new enterprises were rarely attempted. At the close of 1899, however, the balance of trade was fairly maintained and the outflow of specie and bullion seemed to have stopped finally; but the main causes which had operated unfavorably were still existent. Although the year 1900 opened with a feeling of confidence in the commercial circles of the country, it soon became apparent that the inflow of commodities ordered abroad with the expectation of better times had increased. Moreover, the silk crop, upon which Japan relies mainly to adjust the balance of her commerce with foreign countries, was a disappointment. All these causes combined to diminish the cash reserves in the National Bank to such an extent that doubts were entertained as to whether the Bank of Japan would be in a position to maintain the convertibility of its notes.²¹ The rate of discount was raised to a panic point, and another batch of notes was emitted beyond the prescribed limit in order to check the advent of anticipated crisis.

For the entire period of thirty-three years, 1868-1900, the exports of merchandise aggregated 1,953,000,000 yen. An addition of fifteen per cent must be made to the value of the imports prior to 1898 to cover the cost of freight, insurance and other charges incurred up to the time of their arrival at their destination in order to give an approximately correct estimate of the cost of imported goods to Japan. This increases the total sum to 2,621,000,000 yen, and shows

¹⁹ For text, see "Treaties and Conventions between the U. S. and other Powers," p. 526 et seq.

²⁰ "Compilation of Treaties in Force," 1899, p. 352 et seq.

²¹ "Trade of Japan," in "British Consular Reports," Annual Series, 1901.

an unfavorable balance of 668,000,000 yen. It is found, however, that reckoning from 1872, when the official returns relating to the movement of specie became for the first time available, the exports of specie and bullion amount to 435,000,000 yen, while the corresponding imports were 372,000,000 yen. There is thus an excess of 63,000,000 yen on the side of exports. Hence the net balance of about 600,000,000 yen is, roughly speaking, entered on the debtor's side of the nation's account.

How this enormous balance is to be cancelled is a question yet to be solved. Any accurate calculation of international indebtedness can never be made, since the so-called "invisible" items enter. Yet the following statements will furnish a rough idea of the real situation:

1. The foreign commerce of Japan is carried on indirectly through the hands of foreign middlemen resident in the six open ports. Since such is the case, their profits and commissions, though brought down to a reasonable limit by competition among themselves, are and must continue to be great, all the more because in the case of exports the goods sold by the Japanese are sometimes kept in the warehouses of foreigners,²² without any payment to the former, for a considerable length of time according to the conditions of their home markets; while in the case of imports the orders are transmitted to the foreign manufacturers at a time when they are less occupied with the demands of home orders. Certain features of foreigners' business methods have thus been rendered especially irksome. Accordingly, the Japanese merchants have been constantly striving to establish direct dealings with foreign countries. The government has used every occasion to dispense with the intermediary service of the resident foreign merchants. In 1880, the amount of direct trade thus done by Japanese merchants

²² This somewhat arbitrary method of transacting business reached a climax in 1881, when the dispute between foreigners and Japanese was settled by the intervention of the then resident Minister of the United States of America.

independently of foreign agency was 11 per cent; in 1890 it became 19 per cent; and since then it has increased in 1900 to 38 per cent. The profits and commissions thus accruing to Japanese merchants through their direct transactions form one of the invisible elements, which acts precisely with the same force as the actual exportation of commodities from Japan.²³

The real hindrance to the rapid development of direct trade lies in the lack of credit in the broad sense. "The trade of Japan," says a British consul,²⁴ "would never have reached her present proportions had it not been for the foreign resident merchants; and what is true of the past will remain true for a considerable time to come, until the Japanese obtain the knowledge and foresight in business transactions which can only be acquired by experience, and succeed in inspiring the commercial world with confidence. Their credit is not at present sufficiently high for success in direct dealings with foreign countries, and the difficulties of financing their transactions more than counterbalances the gain they make by saving the commission they would otherwise pay to the foreign merchants. No foreign bank would buy a bill drawn on a Japanese firm unless the firm had previously opened credit, and before it could do so it would have to be guaranteed by a Japanese bank of good standing. No firm in Europe or America would at present rely on a Japanese merchant faithfully executing a contract for articles of Japanese manufacture, or would authorize the Japanese merchant to draw a bill on shipment of the goods." The continued use of intermediary merchants is thus seen

²³ At the suggestion of the Department of Agriculture and Commerce, the Tokio Chamber of Commerce made an investigation into the prospects of direct export and import by Japanese merchants. The causes that impede the development of direct foreign trade were enumerated as follows: (1) imperfection of the credit system; (2) the high rate of interest in Japan; (3) the ignorance of the Japanese merchants engaged in direct trade as to the conditions of commerce abroad; (4) want of uniformity in the quality of Japanese manufactures and frequent deterioration of manufacturing processes.

²⁴ "British Consular Reports," Miscellaneous Series, No. 440, 1897.

to be due to imperfections in banking facilities and the absence of business connection with foreign firms. The low tone of commercial morality among the Japanese merchants must also be counted as one of the causes which are hampering the development of direct transactions with foreign countries. If these main causes can be overcome, there is no reason in the present age of rapid communication why consumer and producer, however remote from each other, may not be brought into closer and more direct connection.

2. The earnings of our ships must be considered an important factor by which Japan's obligation to foreign countries are discharged, for the effect of freights is exactly the same as that which we have just stated as exercised by commissions. An apparent excess of imports may be in reality a payment for the service of carrying the trade. The present annual profits derived from Japanese water transportation is estimated at 15,000,000 yen.²⁵ This sum must, therefore, be added yearly to the side of exports. The recent development of Japan's merchant marine has already been sufficiently described, and it only remains to enquire what part of Japan's foreign commerce is carried in her own vessels. This can be best seen from the following table:

PERCENTAGE OF TONNAGE OF JAPANESE AND FOREIGN VESSELS ENTERING PORTS OF JAPAN.

Year	Japanese	English	Others
1880	22	43	35
1890	21	53	26
1899	35	36	29

Thus until 1890 over one-half of Japan's foreign commerce was carried under the English flag. This was due not only to England's supremacy in the world's carrying trade, but also to the fact that the bulk of Japan's import trade was up to that time from England. The other ships engaged in the trade were German, Russian, American,

²⁵ "Japan," in "Encyclopaedia Britannica," new vol. 29.

Norwegian and French, in the order mentioned. At present a share of one-third is falling to Japanese ships. But Japan is taking advantage of her peculiarly favorable position to develop a great mercantile marine as a means of conducting commercial transactions on both sides of the Pacific Ocean.

3. According to Japanese law, the right of land ownership, and also of engaging in the mining industry, is not extended to foreigners, though a proposal is at present mooted for the removal of this prohibition. A foreigner is, however, entitled to hold mortgage on immovables.²⁶ There is also nothing to prevent foreigners as juridical persons from engaging in mining or carrying on a private railway under a license from the government. These provisions were made primarily to induce an inflow of foreign capital upon the conclusion of the New Treaties. Since then a considerable sum of foreign capital has come into the country. Up to this time, however, on account of legal restrictions foreign capital has been nearly unknown in the Japanese money market. Two loans have been raised in London, the first in 1869 to the amount of 4,880,000 yen, and the second in 1873, 11,712,000 yen, for the construction of the railway between Tokio and Yokohama, and also to supply capital to the feudal chiefs and their retainers. Since these two loans have been liquidated, the first in 1881 and the second in 1897, they need not be taken into consideration at present. In 1898, Japan sold bonds to the amount of some four million pounds in the London market, and the money thus sent must be added to the net balance, for it is an outstanding liability of Japan to England. On the other hand, twenty million pounds of the war indemnity of thirty-eight million pounds was brought into the country in the

²⁶ "Foreign Capital in Japan," in "U. S. Consular Reports," No. 267, 1902; "Land Titles of Foreigners in Japan," ibid., No. 250, 1901; "Rights of Foreigners in Japan," ibid., No. 239, 1900; "Mining Privileges in Japan," ibid., No. 236, 1900; "Regulations relating to Foreign Companies in Japan," ibid., No. 229, 1899.

form of merchandise. Since we have already counted the total sum of all the imported specie and bullion, only the balance of some 20,000,000 pounds imported in commodities must be taken into account. The balance of 600,000,000 yen will thus be reduced to 400,000,000 yen by this one heavy item for which Japan did not have to pay. The Chinese securities and shares held by the Japanese, and especially the considerable sum of capital invested in mining and railway construction in Corea, are an offset to the international indebtedness.

4. The expenses of foreign tourists in Japan amount to no inconsiderable sum. A commissioner connected with the customs service made an investigation in 1900 and estimated that 185,000 tourists visited the country during that year. It has been computed that at least 41,000,000 yen must have been brought into the country in this way.²⁷ This estimate is certainly too high, as it allowed nearly 222 yen to each traveller. On the other hand, the Japanese are spending their money in foreign countries and their remittances perhaps more than counterbalance this item.

When all these things are taken into account, we can fairly maintain that there is little, if any, balance left. From the very nature of things, temporary disturbances are inevitable, but, in the long run, the value of exports and imports should be equal, for, to quote a familiar phrase, "the commerce of nations is in reality a system of barter on a magnificent scale."²⁸ Again, the trade with some particular country may show a very favorable or unfavorable balance, but as against the commercial world at large, the balance may be fairly maintained. The countries with which Japan is trading can be conveniently divided into three classes—those from which Japan is importing more than she is exporting to them; those to which Japan is exporting more than she is importing from them; and those

²⁷ "The General Condition of Japan," in "U. S. Consular Reports," No. 226, 1902.

²⁸ Bastable's "Commerce of Nations," p. 25.

from which Japan's imports and to which Japan's exports are approximately equal. To the first class belong England, Germany, British India, Belgium, the Philippine Islands, and French India—the difference of the balance with the last two being rather small. In the second class are Hong Kong, France, Italy and British America. Until 1899, the United States headed the list in this class, but now a change seems to have set in, and in 1900 Japan imported from the United States more than she exported thereto. In the third class come China, Corea, Russian Asia and Australia.

It is, however, unlikely that a country will remain long in one of these classes, since changes are constantly occurring. At present, the balance of Japan's trade with European countries is unfavorable with the exception of France and Italy, to which countries the bulk of Japanese raw silk is exported. The balance with Asiatic countries is fairly maintained when taken together, though with some it shows an adverse condition. This is due to the importation by Japan of raw materials and food-stuffs. For instance, an exceedingly unfavorable balance of trade with British India is due to raw cotton; that with the Philippines, to hemp; and that with French India to rice; but the unfavorable balance with these three countries is cancelled by an exceedingly favorable balance with Hong Kong, the value of exports and imports with the rest of Asiatic countries being almost equal. Generally speaking, Japan sells America as much as she buys. We thus have a triangular form of an international clearing-house system between Europe, Asia and America.

CHAPTER II.

THE CHARACTER OF JAPAN'S COMMERCE.

EXPORTS.

We are now in a position, after this general survey of the development of Japan's foreign commerce, to proceed to a more detailed consideration of the character of the exports and imports. In so doing, it will be convenient to classify all the commodities exported from Japan under the five main heads of (1) agricultural products, (2) minerals, (3) textiles, (4) other manufactures, and (5) marine products.

AGRICULTURAL PRODUCTS.—*Raw Silk*.—Of the agricultural products raw silk stands in the foremost rank as an export. The exports amounted in 1900 to 8,510,000 *kin*, valued at 48,000,000 yen, that is, 24 per cent of the total value of the export trade. In Japan no other industry has received so great an impulse from the opening of the new commerce as silk culture. Within a few years after the export of raw silk began in 1859, its price rose ten or sixteenfold, owing to a disease of the silk worm which raged in Europe between 1856 and 1870.¹ It thus came about that, in 1868, over 40 per cent of Japan's exports consisted of raw silk. Again, in 1876, a failure of the silk crop in France and Italy suddenly increased the exports of silk from 5,000,000 to 13,000,000 yen. About this time, two great silk-spinning factories were established under the auspices of the government and equipped with the most approved machinery of European pattern. In 1879 another factory was added, and in 1890 still another was called into existence by the extension of foreign demand for fine and uniform yarns. The silk industry was greatly stimulated

¹ Rein, "Industries of Japan," pp. 188, 220-23, 381.

by the enhanced prices accompanying the progressive fall in the exchange value of silver. In 1895,² when five factories were simultaneously established, Japan made a gigantic stride in this line of industrial activity. At present there are nine silk-reeling factories having more than 40,000 spindles and over 51,000 operators. In the meantime, the small factories owned by individuals, and run mostly by water power, have also constantly increased. In 1900 the number of such small factories was estimated at 3600, though the aggregate of their productive capacity cannot be ascertained. Besides these, there is an extensive use of hand spindles among the farming classes. It is estimated that there are more than 425,000 houses where silk-reeling is carried on with simple and crude instruments.

Silk culture in Japan is scattered all over the country, but the most favorable location is the table land of the middle and northern portions of the main island, viz.: Nagano, Gumma, Fukushima, Kanagawa, Yamanashi, Saitama, Gifu, Yamagata and Miyagi. The most remarkable progress has been made in these provinces during the last two decades. In 1881 the total area engaged in the cultivation of silk was 102,000 cho; by the end of 1900 it had reached 330,000 cho, the increase in area being three-th^{es}. The annual production of silk increased fivefold at an average corresponding years. As a silk-producing country, Japan now stands next to China, and the amount of silk annually produced in Japan exceeds the production of Western Europe—France, Italy, Spain and Austro-Hungary taken together.³ The demand for silk comes from all over the world. Of the total exports, over fifty per cent goes to the United States, while the balance is distributed among France, England and Italy. The world's total consumption of silk is rapidly increasing, and in this industry immediate expansion may be expected.

² "Silk Spinning in Japan," in "U. S. Consular Reports," No. 246, 1900.

³ "The World's Production of Silk," in "U. S. Consular Reports," No. 246, 1900.

There is, however, much room for improvement in the matter of quality if Japan is to compete successfully with the best filatures of European origin and to hold her present superiority over Chinese silk in the foreign markets. Though the competition of Chinese silk has not been felt much up to the present time, yet this is to be anticipated in view of the fact that foreign management and foreign capital are active in Shanghai and in other places.

Tea.—Tea is one of the principal products of the country and the export amounts at present to some eight or nine million yen yearly. The trade has, however, not made much progress during the last thirty years. This may be ascribed to some extent to the increase in home consumption on account of the gradual increase in population. Yet the tea-producing area in Japan has actually decreased 28 per cent within the past eight years, namely, from 63,000 cho in 1892 to 49,000 cho in 1900. This diminution of area is due to the extension of mulberry orchards and other crops. But this is the effect rather than the cause, and the most immediate cause of the slow development of our export trade in tea is the competition of Chinese tea.

As a tea-producing country Japan stands far behind India, Ceylon and China, though above Java. Japan cannot hope to compete in the continental tea markets with ^{the} ~~the~~ ^{large} countries, which have a decided superiority in clim^ae ^{ut tha}d soil. Moreover, the tea produced in Japan is green tea, differing radically in flavor and bouquet from the black tea of China, appeals rather to American taste than European. For this reason the total export of Japanese tea goes to North America. The United States is solely dependent for its supply of tea upon China and Japan, and the amounts imported from these two countries are nearly equal, with a slight advantage in favor of China. Here the Japanese tea is meeting with severe competition.

Until 1869, China practically monopolized the tea trade of the world, but since then India has become a strong rival, the result being that the importation of Chinese tea into

England has decreased to an insignificant quantity, while the annual production of tea in India has increased 161 per cent during the past fifteen years.⁴ The consequent change in the destination of Chinese tea is worthy of note. During the last decade, the exportation of Chinese tea to Europe fell off much more than one-half, whereas that to the United States and to Canada almost quadrupled.⁵ This striking change in the destination of Chinese tea explains the unsatisfactory condition of the Japanese tea trade in North America. Japan has also been losing her hold lately in Canada through the competition of Ceylon tea, the importation of which has increased nearly 40 per cent during the past five years, while Japanese tea shows a falling off of nearly the same percentage. The success of Ceylon tea is attributed to the sums of money spent in advertising and to the reduction made in the cost by the application of machinery in its production. From the fact that Chinese tea has already been driven partially from Europe, the appearance of Ceylon tea in the neutral markets of North America must be regarded as the sign of an approaching struggle for supremacy among the tea-producing countries in the Orient.

The outlook for Japanese tea has, however, become more favorable. As one result of the recent Chino-Japanese war, Japan has secured in Formosa one of the best soils for tea cultivation. Up to 1871 or 1872, Formosa had produced but little tea. Since that time, through the efforts of Chinese tea merchants, tea plantations have been rapidly developed there, and Amoy is largely dependent upon the Formosan tea trade for its prosperity.⁶ The Formosan Oolong is now universally recognized as the choicest tea grown in the world. "Its production," says an American consul,⁷

⁴ "The Tea Trade of England with India, Ceylon, and China," in "U. S. Consular Reports," No. 242, 1900.

⁵ "The Trade of China in 1900," in "U. S. Consular Reports," No. 251, 1901.

⁶ "Formosan Tea Trade," in "U. S. Consular Reports," No. 218, 1898. ⁷ "U. S. Consular Reports," No. 225, 1899.

"is the most important and valuable industry in Formosa. Although occupying but one-sixth of the territory utilized for sugar, but a fraction of that given up to rice or of the area covered with the vast camphor forests, the production brings to the island nearly five times the receipts obtained from sugar, over five times that obtained from camphor, and more than one-half of the total value of the whole export trade of Formosa." In 1897, the value of the tea exported from Formosa amounted to 6,921,000 yen. Kobe is now gradually displacing Amoy as a transshipping point, a tendency which the Japanese government has taken means to hasten by imposing a preferential duty on teas shipped to foreign countries as against those shipped to Japan.

Rice.—The demand for Japanese rice has gradually increased owing to the gradual recognition of its superior quality. Until 1873, the export of rice was prohibited by law, the object being to prevent a rise in the domestic price. This law was repealed in 1873, and the export of rice to London began as a payment for the foreign loan. At present the demand for it comes from the Western markets as well as from the United States. A serious drawback to the export of Japanese rice is the want of uniformity in the quality and amount sent abroad and the consequent impossibility of offering any reliable quotations to the world market. The fluctuation is so violent, between a good and a bad crop year, that no standard can be obtained by which we can measure the development of its exports. In 1899, the value of the rice exported from Japan amounted to 10,000,000 yen, but in the following year it decreased to one-third of this amount.*

MINERAL PRODUCTS.—Precious Metals.—At one time the word Zipangu, or Japan, was synonymous with gold and silver, yet the smallness of the present annual yield, in 1900 only 5,000,000 yen, hardly warrants this ancient belief in the fabulous wealth of Japan.

* See also below, p. 67.

When the Japanese first came into contact with the Portuguese and later with the Dutch, there was a considerable stock of precious metals, especially of gold, in the country. The value of gold was six times that of silver, whereas in Europe it was twelve times as great. The total value of the precious metals exported from Japan during the sixteenth and seventeenth centuries is estimated at 103,000,000 pounds,⁹ the larger part of which was gold. "The relatively large amount of gold," says Dr. Geerts, "does not prove, however, the extreme richness of the country, because it was in reality the product of gold-washing during many centuries. Japan being closed at that time to nearly the whole world, the gold remained in the country and augmented each year. Under these circumstances, the quantity of gold must have been considerable after so many centuries, even if the country contained but a moderate quantity of ore." Whether this opinion is well-founded or not, the extraction of metals was in active progress from the years 1590 to 1671, when an edict of the Shogunate put a peremptory stop to the exportation of all bullion; since that year the records show a constant decline in the annual output of precious metals.

Many of the present mines are of several centuries' standing, and have already begun to show signs of exhaustion. Again, many old mines are flooded and abandoned, not on account of entire exhaustion, but from lack of deposits easily accessible and workable by Japanese methods of mining.¹⁰ If these mines can be reopened with improved machin-

⁹ After weighing many writers' opinions, Dr. Geerts makes the following estimates:

	Pounds.
Portuguese: Gold and silver.....	59,500,000
Dutch: Gold	15,482,250
Silver	28,000,000
	<hr/>
	102,982,250

See "Useful Minerals and Metallurgy of the Japanese," in Transactions of Asiatic Society of Japan, vol. iv, p. 91.

¹⁰ Henry S. Munroe, in The Japanese Engineering and Mining Journal, vol. 22.

ery, and foreign capital can be persuaded, by a more liberal mining law, to join in the work, we may expect that the annual yield of precious metals will equal, if not exceed, that of former times. "Gold veins," says an authority,¹¹ "are very well distributed throughout the country from Hokkaido in the north to the farthest end of Kiushu in the south, and by employing proper methods there should be no difficulty in placing Japan among the gold-producing countries." Quite recently a promising gold mine was discovered in Hokkaido. Since, however, the export of precious metals at present is insignificant, we can well dispose of the subject with a passing notice. The real subterranean treasure of Japan lies in the rich deposits of coal and copper.

Coal.—The export of coal is one of the phenomenal features of Japanese trade. During a period of twenty years ending in 1900, coal exports increased from only 284,000 tons to 3,350,000 tons, with a corresponding increase in value from 1,000,000 yen to 20,000,000 yen. Most of the coal mines in Japan were sunk between the years 1887 and 1890, the period during which the so-called "coal fever" prevailed in the country, accentuated by the removal of the export duty on coal in 1888. But the decided increase in exports began in 1897, and was due to the universal industrial activity prevailing after the close of the war. The coal of Japan varies from the hardest anthracite to peat, but the quality is said to be generally inferior to that of American coal. Trans-Pacific steamers now coal regularly at the ports of Japan, and Japanese coal has already superseded Australian coal at Hong Kong and Singapore coaling stations. The idea of exporting Hokkaido coal to America has already been considered by both nations, and the completion of the trans-Siberian railway will necessarily call for an increase in the export for the use of steamers and locomotives.

¹¹ "Mineral Products of Japan," in "U. S. Consular Reports," No. 260, 1902.

According to the estimate of Henry S. Munroe, the total coal-bearing area of Japan amounts to about 5000 square miles, while the average thickness of veins is fifteen feet. The coal product of Great Britain, it has been estimated, is equivalent to the labor of 133,000,000 operators working without wages for her enrichment. Japan, says Mr. Munroe, has now, in the Ishikari field alone, stored up, and available for at least two centuries' use, the labor of an equal body of men.¹² But it may be very much doubted whether this report of Mr. Munro is not somewhat exaggerated. Though a more recent careful geological survey has been made, it seems that the extent and amount of deposits cannot be ascertained with precision.¹³ In 1899, the number of plants for mining coal was 2108, covering an area of over 318,644,670 tsubo (1 tsubo = 0.03306 acre), and having a total estimated supply of 1,593,000,000 tons of coal. At the present rate of consumption, which amounts to some 9,000,000 (viz.: 4,000,000 tons for export and 5,000,000 tons for home use), this supply will, roughly speaking, last about one hundred and seventy years.

In the past, our industries were supported by the richness of the forests. In a country like Japan, where the entire stock of fuel for domestic use was either wood or charcoal, the annual consumption not only amounted to an enormous quantity, but it also increased proportionately with the growth of population. Although the cultivation of forests by the so-called "cycling hewing" has been practiced, the price of wood and charcoal has gone up steadily during the past twenty years. In consequence, coal has been substituted for wood in many of the old industries, such as salt boiling. This, together with the rise of new industries and the extension of railways, has

¹² Quoted by Mr. Y. Ono in his "Industrial Transition in Japan," in "Publications American Economic Association," vol. 5, pp. 52-53.

¹³ See the reports of Mr. Lyman, an American geologist, and also a somewhat careful study of the coal mines in Japan in "British Consular Reports," Annual Series, No. 1638, 1895.

increased the home consumption of coal from 1,430,000 tons in 1890 to 4,994,000 tons in 1900—an average increase of 350,000 tons annually. The annual demand for coal, both domestic and foreign, is likely to increase at a rapid rate for a considerable number of years to come. Hence, we are forced to conclude that, even though there be a large stock of coal deposits yet undiscovered, the present methods of mining in small plants with inadequate capital must be vigorously prohibited in order to keep the coal supply as steady and permanent as possible. In Japan, where an abundant supply of natural water power from the mountains can easily be obtained, the utilization of this motive power would result in a great economy of coal.

Copper.—The export of copper has also made remarkable progress during the past twenty years. In 1880, the total export of copper, both refined and coarse, amounted to 2,000,000 kin, valued at 12,863,000 yen; the increase from 1880 to 1890 was tenfold in quantity and nearly twenty-sevenfold in value. This large relative increase in value was due not to the rise in price, but to an increase in the exportation of refined copper in comparison with that of the coarse metal.

Copper is found almost everywhere in Japan and has been mined from very early times. Its export began in 1644, and it was one of the most important commodities in the Dutch trade. Though the annual amount of export was limited by law, it is calculated that 206,253 tons of copper were exported by the Dutch during the period from 1609 to 1858,¹⁴ and consequently in the latter part of the seventeenth century copper became scarce in the country. Of late years the extensive demand from British India, China and Hong Kong for this metal has stimulated the industry and considerable capital has been invested in modern appliances, the result being a rapid increase in the annual output of copper since 1885. In 1900 the total yield

¹⁴ Rein, "Industries of Japan," p. 335.

amounted to 40,000,000 kin. Though copper is used in the manufacture of various kinds of domestic wares, its home consumption does not amount to any considerable quantity.

TEXTILE MANUFACTURES.—*Cotton Yarns.*—In this field Japan started on a new career and has made great progress within one decade. In 1890 the amount of cotton yarn exported was only 9000 kin, valued at 2000 yen; it increased to 62,619,000 kin in 1900, the total value of which was 20,589,000 yen. The year 1900, moreover, was a particularly bad year for the cotton trade on account of the Boxer trouble, which practically closed the greater portion of the North China trade and reduced the export of Japanese cotton yarn more than 38 per cent as compared with that of the previous year. Japanese yarns have not only superseded entirely the coarser yarns of Lancashire and Bombay in the home market, but have successfully competed in the neutral markets of continental Asia, ousting English and Indian yarns from Corea, China and Hong Kong. During the past five years the export of English yarns to Corea decreased one-half, that of Indian yarns to nearly one twenty-eighth, whereas the export of Japanese yarns increased six-fold. According to the customs returns of China, however, Indian yarns constituted 72 per cent of the total yarns imported into China in 1900, while the Japanese yarns were but 26 per cent. Japanese yarns have been introduced only in Tientsin, Chefoo, Newchang, Hankow, and a few other districts, while the Bombay yarn is distributed widely in the interior of China. In some large consuming districts, such as Chowkei, Gisho, and throughout southern China, no sale of Japanese yarn has yet been recorded. It will thus be seen that the competition of our cotton yarns in the Chinese market is only beginning.

The feudal chief of Satsuma started a mill with 5000 spindles in 1862. During the two decades following there were only one or two factories established for spinning cotton yarns. Between the years 1881 and 1885, however, the period during which private enterprises in Japan finally

started upon a career of independent activity, no less than twenty-one cotton spinning factories, with 62,000 spindles, began operations. "By foreign observers," says a foreign writer,¹⁵ "this new departure was regarded with contemptuous amusement. The Japanese were declared without organizing capacity, incapable of sustained energy, and generally unfitted for factory work." The pessimistic views entertained by foreign observers were radically modified, when, by 1900, the number of mills had increased to seventy-nine with a total paid-up capital of 30,000,000 yen, and the number of spindles to 1,088,000 with an output of 201,000,-000 kin. Considerably over two-thirds of the product remain in the country, and the importations of foreign yarns have thus been checked.

In view of such rapid growth of the cotton-spinning industry in Japan, let us briefly consider at what economic advantage or disadvantage the Japanese spinner is competing with his rivals in Manchester and Bombay. It is said that the proportion between hands and spindles is three or four times as great in Japan as in the English factories, though the evidence is by no means conclusive on this point.¹⁶ The proportion of operators to spindles is practically the same in Japan as in India, being about one workman to 30 spindles.¹⁷ In deftness and delicacy of touch, Japanese operators have no rivals, but the Japanese industry is handicapped as yet by the scarcity of skilled labor. This disadvantage is, however, counterbalanced by the longer working hours of the Japanese mills, which work twenty-three hours out of twenty-four with two shift of operators, and consequently their production per spindle is 40 per cent

¹⁵ "Japan," in "Encyclopædia Britannica," new vol. 29.

¹⁶ For example, two men, six women and two children are observed to be in attendance on one pair of mules of 800 spindles each. In England, one man and two boys would look after one pair of mules of 1000 spindles each.—"British Consular Reports," Miscellaneous Series, No. 440, 1897.

¹⁷ "British Consular Reports," Miscellaneous Series, No. 231, 1892.

greater than the production at the Bombay mills, and nearly double the production at English mills.¹⁸

Another, and by far the most important, factor is the low rate of wages. In 1900, wages were 9 cents per diem (American gold) for men, and 5 cents for women in Japan, while in the same year they ranged from \$1.34 to \$1.68 in England, and from 13 to 35 cents in India.¹⁹ It will thus be seen that the wages of the Japanese spinners are far lower than those ruling in India. Though it is a false notion that low wages in themselves are sufficient to establish Japan's yarn trade, there is no gainsaying the fact that the rate of wages has much to do with the determination of the cost of production. The scarcity of capital and the consequent high rate of interest, which ranges ordinarily from 8 to 10 per cent, and sometimes even as high as 12 per cent, is a drawback. But this is offset by the longer working hours of the Japanese mills and the consequent larger production of yarn per spindle. Whether the mills are run at night or not, the cotton spinning companies have to pay the same rate of interest. According to the British Consular Reports, Japanese cotton is too short in staple and too coarse in quality for spinning the higher counts of yarns, while the lower counts spun from it are too weak to be used in power-loom weaving.²⁰ Yet the cost of carriage has been so much reduced through recent advances in transportation methods that distance from the source of supply is no longer an important factor. Coal is abundant and cheap in Japan. Unfortunately, the absence of reliable data precludes any approximate estimate of the comparative cost of producing yarns in these three countries. From the fact that the average annual profit per spindle is, at present, 3½ yen, or 13½ per cent on the capital invested, we can fairly infer that cotton spinning in Japan is on the road to success.

¹⁸ "Japan," in "Encyclopædia Britannica."

¹⁹ "Wages in Commercial Countries," in "Fifteenth Annual Report of the Commissioner of Labor," 1900, vol. 2, p. 1374.

²⁰ "British Consular Reports," Miscellaneous Series, No. 231, 1903.

Silk Fabrics.—The silk fabrics exported are chiefly hand-kerchiefs and habutayo (white silk fabrics); in 1890 the value of the exports of the former was 3,000,000 yen (826,000 dozens), and of the latter 818,000 yen (104,000 *tan*); at the end of 1900 the figures had increased to 4,000,000 yen (1,133,000 dozens) and 18,000,000 yen (968,000 *tan*), respectively.

This trade was started in 1887 with the object of exporting the white silk fabrics called habutayo. The industry is concentrated in one district of the Fukui prefecture, situated on the northwestern coast of the main island. From the figures noted above, the development of this trade appears satisfactory, yet it may reasonably be asked why the Japanese, with an immense amount of raw material and cheap labor at hand, did not begin much earlier to enter into competition with European silk markets. The explanation is simple. The silk-weaving industry in Japan was for a time seriously embarrassed by the opening of the new commerce. “The cheap cotton and wool stuffs thrown on the market from foreign countries for several decades compete constantly more strongly with silk materials. Most of the velvet looms were obliged to suspend competition with the extraordinary cheap velvets of Manchester. The export of raw silk has had a great influence on the price of raw material. Many Japanese, under these circumstances, found themselves obliged to give up their custom of wearing all silk clothing, and to use the much cheaper woolen and cotton material.”²¹ A more serious difficulty lies in the lack of skill and the differences in artistic tastes. It is difficult for Japanese manufacturers to follow the patterns and designs of Parisian and Lyonnaise artists, which are ever changing according to the fashion of the season.

In Japan, silk is mainly manufactured for satin, striped cloth, crape and sashes differing in form and design to suit the needs of the people. Recently a large silk factory, with

²¹ Rein, “The Industries of Japan,” p. 381.

the most improved machinery from France, was established in Kyoto and employed a few French experts with the avowed intention of manufacturing silk fabrics for export. After some years of unsuccessful attempt, the project was abandoned and the mill is at present manufacturing curtain and upholstery materials, which have found a good market in England and Australia, and is also making satins and sash materials for home use.²² It has been found that the lack of skill and experience is the greatest barrier to the development of the silk-weaving industry. When we remember that the French weavers on the Croix-Rousse Hill have no idea how many generations their families have been working in the same rooms,²³ it is plain that the industrial development of a nation cannot always be forced by hot-house methods.

While the spinning industry has made marvelous progress during the last twenty years, weaving by steam and electric machinery has proceeded at a much slower pace. The advantage of machinery over hand labor is not nearly so great in weaving as in spinning. There is also a great difference in cost between a native hand loom and a power machine. The former costs but 5 yen, while the latter, besides requiring a separate building, would cost, with accessories, nearly 500 yen.²⁴ These causes are delaying to a great extent the introduction of power looms. In 1899, there were 741,000 hand looms in use in Japan (excluding those in private houses designed merely to produce goods for domestic use) employing some 820,000 weavers. From the comparative numbers of looms and weavers it is clear that the use of power looms in Japan is still small and that the old system of domestic manufacture still controls this industry.

Cotton Fabrics.—Under such circumstances it is not won-

²² "Textile Industries in Japan," in "U. S. Consular Reports," No. 240, 1899.

²³ See the brief sketch of the history of silk industry in France in "U. S. Consular Reports," No. 240, 1899.

²⁴ "The Textile Industry in Japan," in "U. S. Consular Reports," No. 224, 1899.

derful that the export of our cotton piece goods to China and Corea, though growing steadily, is still small. In 1890 it amounted to 173,000 yen, and between the years 1895 and 1900 it has increased from 1,109,000 yen to 5,723,000 yen.

Another manufacture is that of carpets and rugs, the demand for which comes almost exclusively from the United States. In Japan, carpets and rugs are a modern luxury. Before the days of foreign commerce those used in the country were merely a kind of cushion made of cotton and silk; but the fancy of the people for foreign carpets after the opening of the new commerce stimulated the industry so much that as early as 1878 carpets and rugs were exported to America and Europe.²⁵ The materials used are hemp, jute, cotton, wool and silk—the two latter separately or in combination. The designs are mostly imitations of Turkish or Persian rugs; some of the old flowers of Japanese designs are reproduced with fast dyes and in beautiful shades. In both appearance and durability, Japanese carpets and rugs are said to be almost equal to those of Turkey.²⁶ Through the increase of foreign demand, the trade has now grown to large proportions, amounting to 2,000,000 yen annually. It affords one of the striking examples of the successful competition of cheap labor with machinery. It is largely a "home industry," only one or two factories employing more than 100 hands each. Kobe is the center of the rug-making district.²⁷

Before leaving the subject of textile manufactures, attention should be called to their pre-eminent importance in Japan's foreign commerce, inasmuch as they constitute over 50 per cent of total exports, if we include the raw silk. It is, however, only in the spinning industry that our textile manufactures have begun to make rapid progress. Japan

²⁵ "British Consular Reports," Miscellaneous Series, No. 440, 1897.

²⁶ *Ibid.*

²⁷ "The Textile Industry in Japan," in "U. S. Consular Reports," No. 224, 1899.

does not yet weave enough cloth for the home demand, and is a large importer of the various kinds of foreign textile manufactures.

We see here clearly the great inequality in the development of Japan's industries. In our present industrial society, where the division of labor with its mutual interdependence is carried to an extreme, the expansion and the healthy growth of any industry is only possible when the allied industries develop equally. For instance, the silk-weaving industry in Fukui prefecture, in its sudden growth, has felt keenly the imperfection of the banking facilities. If to this burden we add lack of commercial experience and business management we can well realize under how many serious impediments these industries have labored to attain their present proportions.

OTHER MANUFACTURES.—*Artistic Works.*—The manufactured commodities, other than the textile manufactures, exported from Japan can be conveniently divided into two groups, artistic works and miscellaneous manufactures. In the first class the porcelain and earthen wares, cloisonné, metal and bamboo works, lacquer wares, wood and ivory carvings. “Whether good or not,” says Mr. Ono,²⁸ “both in design and workmanship, Japanese art carries with it the taste and aspiration of the race. Nowhere is the insular character of Japan so strongly marked as in her arts and manufactures. Up to the time of the London Exhibition of 1862, the civilized people of the West were as ignorant of Japanese art as were the artists of the eighteenth century of the Eglin marbles. But since then it has been thoroughly advertised by means of the expositions of Paris, Vienna and Philadelphia.” “Wherever you moved about among the ornamental works of the exhibition of Vienna,” said a writer of this period,²⁹ “and especially among the

²⁸ Ono, “The Industrial Transition in Japan,” in “Publications of American Economic Association,” vol. v, p. 48.

²⁹ Blackwood’s Magazine, vol. 116, p. 697; Living Age, No. 122, p. 239.

ceramics, the wood carving, and the precious metals, you saw the Japanese ideas in the ascendant. As for the fabrics of the famous pottery ware, the coloring of the painted flowers and the tints of the birds, they were the envy and despair of Staffordshire potteries and Parisian artists. No European fingers had the nicety to manipulate those minute placques of gold that were wrought into those wondrous designs on the exquisitely finished cabinets." "The rich treasures of art work," said Sir Rutherford Alcock,³⁰ "came upon Europe as a new revelation in decorative and industrial art, and have continued since to exercise a strong and abiding influence on all industrial art work."

How far our art works have attracted the world's attention is indicated by the remarkable extent to which the Japanese models of ceramics and bronze works have been reproduced in England and France,³¹ and by the recent imitation of lacquer wares in Germany. All of these artistic works were developed during the time when artisans enjoyed the patronage of feudal chiefs, and when they competed with each other for that privilege and honor. The time and patience required to attain such a degree of skill caused it to be regarded as a sort of private property, and trade secrets were jealously guarded and handed down from father to son "Its antiquity," says Captain Brinkly,³² "is not, indeed, comparable to that of ancient Egypt or Greece, but no country in the world beside Japan can boast of a living and highly developed art that has numbered upwards of twelve hundred years of unbroken and brilliant productiveness. It is generally supposed to have reached its culmination in the hands of a group of great experts who flourished during the second half of the eighteenth century and the first half of the nineteenth. It was the era of the artisan artist."

We are not, however, concerned here with this subject

³⁰ "Japan," in "Encyclopædia Britannica," 9th edition.

³¹ Rein, "The Industries of Japan," pp. 331-334.

³² "Japan," in "Encyclopædia Britannica," new vol. 29.

from the standpoint of art, but with its economic importance as a source of national wealth. "Very few pieces of the highest artistic merit have been produced since the Restoration," says Dr. Griffis,³³ "as the making of porcelain and faience in Japan has since 1868 degenerated from an art to a trade. Formerly the artisan was an artist and worked for low wages and honor. He lived on a few bronze cash per day, yet enjoyed the presence and friendship of his lord." Accordingly, most of these industries have suffered a sudden check with the downfall of the feudal system. Although the industries have begun to regain vigor with the gradual extension of foreign markets, and of late many large establishments have been formed by uniting the small concerns of the independent master workmen of the bygone days, there is little doubt that there has been a great degeneration in the matter of quality. The old Satsuma, Hizen and Kioto potteries, which have been so much valued by the true lovers of art both in Europe and America, are now imitated in scores of kilns all over the country. It is only in very recent times that the potteries of Owari, Mino and Kaga have become celebrated, and those near Tokio and Yokohama only within the last two decades."³⁴

"Porcelain clays," says a former American consul-general, "are found in nearly all portions of the country, and what is of great economic advantage, the different kinds of the purest and best quality are usually found in close proximity and in many places near water transportation. I believe in all cases every variety of clay used in the manufacture of pottery is found in a natural state. There is no necessity to manufacture the quartzose or fusible clay, as is done in other parts of the world, which adds much to the cost of the ware. It is still more remarkable to find one

³³ Griffis, "The Mikado's Empire," p. 656.

³⁴ The Japanese potteries are known by the names of the provinces in which they are produced; for some valuable notes, see "Official Catalogue of the Japanese Section, International Exhibition, Philadelphia, 1876."

clay which contains both the fusible and infusible materials in such proportions as to make a light, beautiful, translucent and durable porcelain. I am not aware that such clays are found in any other country."³⁵ Taking the country as a whole, there are over 280 deposits of clay adapted to the various kinds of pottery, and so vast are these deposits that there can be no possible danger of exhaustion. With such an unlimited supply of the best raw material, and the advantage of cheap and skilled labor, it should not be difficult for Japan to take the foremost rank in the world's market in this important form of industry. The present downward tendency of Japanese ceramics, it is to be hoped, will be arrested and the art restored to its former glory by the efficient efforts of the government, and the interest of individual art lovers. It may be expected also that the art will be improved by proper foreign influence.

It would be erroneous, however, to say that Japanese art as a whole has degenerated. The fact of the matter is that the production of Japanese potteries has become not qualitative, but quantitative in consequence of the sudden extension of foreign markets. In former times the demand for such artistic works was limited to the privileged classes of the country. In 1900, the export of pottery amounted to 2,471,000 yen as against 474,000 yen in 1880, an increase of 500 per cent in the course of twenty years. The production of other art goods is localized in certain cities. Kioto, the ancient capital, may be said to be the center of Japanese arts, and leads all other cities in the manufacture of silk brocades, bronze works, and cloisonné, while Tokio is famous for lacquer wares. Other producing districts are Aidzu, Kii, Shizuoka, Hakone, Kaga, and Osaka. Bamboo is of two kinds, black and white, and is exported chiefly in the form of fishing rods, handles of umbrellas and sticks. Wood and ivory carvings are not less interesting, as they

³⁵ Quoted in "The Industrial Transition in Japan," by Y. Ono, "Publications of American Economic Association," vol. v, p. 61.

are highly artistic products, and the foreign demand has increased much of late years.

The relative importance of our three main branches of artistic manufacture, according to the official census of 1899, is shown in the following table:

	Potteries.	Lacquer Wares.	Bronze Works.
Number of factories	4,604	4,147	1,238
Number of workmen	19,454	20,373	5,359
Value of products	5,867,000	5,640,000	1,383,000
Value of exports	2,471,000	1,066,000	

In all three branches of the artistic manufactures, the preponderant value of home consumption as compared with that of exports shows that our exports of artistic works are still simply the outflow of the surplus products and that the industries are not yet managed with a view to foreign trade. The difference of race characteristics requires that a great part of the commodities exported from Japan should be manufactured specially with that purpose in view. It is, therefore, highly desirable to put the Japanese producers in constant touch with the European patterns and designs. The slow progress of our artistic industries is perhaps owing to this very obstacle. But the most striking fact is that in all these three industries the relative number of factories and workmen is nearly the same, averaging about five workmen to one factory. Here, as elsewhere, we see that the large factories are very few, and that domestic manufacture of a primitive type still prevails. In such a stage of production, it is altogether impossible to expect any gratifying expansion of our pottery, lacquer and bronze manufactures. The steps to be taken at present, therefore, are (1) to consolidate the small concerns into large factories, and (2) to establish means of information regarding the conditions in foreign markets.

Miscellaneous Manufactures.—Of the miscellaneous manufactures matches head the list in the order of importance. The manufacture of matches originated in the prisons, and as early as 1873 was carried on in the jails of

Yokohama. The first record of any export appears in the customs returns of 1878; since then the trade has grown to such large proportions that the total value of matches exported from Japan in 1900 amounted to 5,760,000 yen.³⁶ Formerly, the matches used in China, Siam and the Straits Settlement were English made; in the course of time these were displaced by Swedish, and the latter have now in turn met a precisely similar fate from Japanese competition. Here then is a trade which has risen from nothing to an important position by successful competition. It supports more than 270 factories, giving employment to 19,000 persons. "It is perhaps in a match factory," says a British consul,³⁷ "that the advantages of cheap labor can best be seen. Osaka and Kobe are the centers of this industry, and nearly the whole process is done by hand and the cost of making matches resolves itself chiefly into a question of wages. It seems to be a close contest between the German machines and the nimble fingers of Japanese women. I was told, however, that the machine work was not much cheaper. It seems strange that human fingers could be able to place short sticks each in its own niche as cheaply as a machine that disposes of 2250 splints at one operation; but I was amazed at the celerity of human fingers, and the lightning rapidity and magic pass with which the whole process is done by bright, happy and contented girls, for the Japanese woman is blessed with a cheerful disposition."

Next in order are the straw plaits and floor matting, and the increase in the exports of these two commodities is equally remarkable. In 1887, the export of straw plaits was 350,000 yen, while that of floor matting was 36,000 yen, and at the end of 1900 the corresponding figures were 4,025,000 yen and 3,310,000 yen, respectively. The rapidity with which so many industries and trades have grown up

³⁶ "British Consular Reports," Annual Series, 1886 and 1896.

³⁷ See the minute and graphic description of the whole process of Japanese match-making in "British Consular Reports," Miscellaneous Series, No. 440, 1897.

during the last fifteen years is a marked characteristic of Japan's progress, and in order to make it clear in what way they are springing up, an actual incident may be cited. "In 1880 a man named Isozaki, of the Okoyama prefecture, carried to Kobe a specimen of a new kind of mat, the outcome of two years' trial and thought. Briefly described, it was a floor matting with a weft of fine green reeds, and a warp of cotton yarn, having a colored design woven into it. He found difficulty in getting any one to test the salability of his invention by sending it abroad. Sixteen years later the 'brocade matting' industry in Okoyama prefecture alone occupied 734 weaving establishments, with 9085 stands of looms; gave employment to 9357 artisans, of whom 5335 were females, and turned out two and one-half million yen worth of this pretty floor covering."⁸⁸ Through the increase in demand, which comes chiefly from the United States, the industry has rapidly spread in other prefectures, and beautiful designs can now be obtained at short notice. The plant used in Japan in the manufacture of matting is a species of rush widely distributed throughout the northern hemisphere.⁸⁹ The best rushes are cultivated in swampy ground in the provinces of Bizen, Bingo and Bungo in the south of Japan, where the manufacture of floor matting is almost exclusively carried on.

The same remarkable growth has been made by the straw-braid industry. The first shipments were made in 1882, and the manufacture was at first confined to one district of Omori, situated between Tokio and Yokohama. Since then the trade has grown to such large dimensions that there were, in 1899, 22,000 factories employing some 71,000 persons. The straws are brought to the manufacturing centers from the country districts. According to the American Consular Reports the Japanese straw-braid has been pronounced by large dealers in the United States the finest in

⁸⁸ "Japan," in "Encyclopædia Britannica," new vol. 29.

⁸⁹ "Cultivation of Rushes for Mats in Japan," in "U. S. Consular Reports," No. 225, 1899.

use, and it is said to be fast taking the place of the celebrated Mackinaw braids, which for a long time have commanded the highest prices in the market.⁴⁰

The manufacture of camphor is an old industry, and its export has continued since the opening of the new commerce. The consumption among the natives is very small, and had it not been for the foreign demand there would have been but little expansion of its manufacture. The active extraction of camphor, which is a resinous gum made by the distillation from camphor trees, appears to have begun about 1886, and from that year to 1899 its export ranged from 1,000,000 yen to 1,932,000 yen, with a sudden increase to 3,070,000 yen in 1900. It is exported chiefly to Hong Kong, the rest being distributed among the United States, England, Germany and a few other countries. The large forests of camphor trees are found in the provinces of Tosa, Hiuga and Satsuma. Many are owned by the government and reserved for shipbuilding and other purposes. The wood is also highly prized for furniture and chests. Those owned by private individuals, however, seem to have been fast exhausted, and partly owing to the increase in the cost of production, most of the local manufacturers have of late years suspended work. But in Formosa, Japan found important camphor forests, the exact extent of which is not yet known. In 1899, the Japanese government, with the double object of increasing the public revenue and of obtaining a more complete control over the camphor forests, established a large camphor factory at the capital of Formosa, Taihoku (taipeh), and has since made the manufacture and sale of camphor a monopoly.⁴¹ The world's supply of camphor is thus practically controlled by the Japanese government, which fixes the price and limits the amount of annual production. The advisability of such a measure is

⁴⁰ "Straw-braids in Japan," in "U. S. Consular Reports," No. 49, 1885.

⁴¹ "Camphor Monopoly in Formosa," in "U. S. Consular Reports," Nos. 240, 242, 1900.

a matter of dispute, but forms no part of our present consideration. From the very fact that the production of camphor is confined almost exclusively to Japan there need be little fear of foreign competition for many years to come, though artificial camphor made by chemical means may be substituted for many purposes.

The manufacture of paper is also an old industry, one of the most widely scattered industries of Japan. The export was 41,000 yen in 1868; 51,000 in 1878; 224,000 in 1888; from about the year 1893 it made rapid progress until it reached 2,000,000 yen in 1900. The paper is made from the best pulp of certain plants known as "Kozu," the cultivation of which is an important agricultural interest in several provinces. Japanese paper is entirely different from that produced in other countries. Its characteristics are great strength and remarkable pliability, and it is adapted to the manufacture of many Japanese articles, such as napkins, handkerchiefs, lanterns, umbrellas, fans. It is also used as a substitute for window glass and is most suitable for fine prints and engravings.⁴² Among the different kinds of paper the following are worthy of mention, on account of their importance in foreign commerce: rich imitations of leather for wall paper, as firm as wood and much more durable; heavy oil papers which to some extent replace oilcloth; beautifully designed napkins and tissue copying paper. These valuable papers are shipped largely to the United States and considerable quantities go also to England and other European countries.

Japan is, however, a large importer of foreign machine-made printing paper for newspapers, books and periodicals; these wares amounted in 1898 to 2,283,000 yen, a value nearly equal to that of the exported paper. The manufacture of foreign varieties of paper was started as early as 1875, but it has not developed very rapidly. In 1898, there

⁴² "Paper in Foreign Countries," in "U. S. Consular Reports," vol. xix, 1900; see also "British Consular Reports," Annual Series, No. 1638, 1895.

were about 15 mills in operation in Japan, turning out some 40,000,000 pounds of printing and book papers, which amounted to 2,800,000 yen, if the average price is estimated at 7 yen per pound. The amount was thus far short of the requirements of a home market where the daily and weekly publications of newspapers and periodicals number more than 3000. It appears from this comparatively slow progress that the manufacture of foreign varieties of paper in Japan cannot be conducted as profitably as might appear at first sight. In the manufacture of domestic varieties, the whole process is done by hand, there being absolutely no machinery used. Hence, not only patience and time, but an immense amount of skill and very deft handling are necessary, and the whole *modus operandi* is in strict adherence to the canons of a primitive art. It is, therefore, highly desirable that public attention should be sufficiently called to the desirability of improvements in methods, especially in view of the enormous dimensions of the paper-making industry, which employs more than 157,000 persons in 65,000 establishments, with a total output valued at 12,036,000 yen in 1899.

We have now reviewed all the important exported manufactures of Japan. There are left only certain articles needing hardly more than a passing note. Drugs, medicines, chemicals, dyes and paints were exported to the value of 2,300,000 yen in 1900. Among other manufactures, reference might be made to fans, European umbrellas, clocks, tooth brushes, hats, shoes, etc., although, with the exception of the first two articles mentioned, separate consideration of each of these items is unnecessary on account of the insignificant quantity exported. The export of fans was 90,00 yen in 1883, while that of European umbrellas was 900 yen in the same year; the corresponding figures had increased to 911,000 and 156,000 yen respectively in 1900. Umbrellas go to Europe and America, while clocks are distributed in large quantities in the continental markets of Asia, from Vladivostok through Corea, China, Hong Kong, to the Straits Settlements and British India. It is

worthy of notice that these commodities were introduced into Japan from foreign countries, and their appearance on the export side means that Japan is now able to manufacture for herself and is beginning to dispose of her super-abundance. The stages through which industry has progressed in Japan can be illustrated by careful study of the customs returns of umbrellas. In 1875, 212,000 foreign umbrellas were imported; in 1886, they had entirely disappeared from the list of imports, while, on the other hand, the imports of Italian cloth and iron wire from which the umbrella is made showed an enormous increase. Japan is still dependent for the supply of umbrella ribs upon foreign countries, and in the case of clocks and watches, the entire apparatus can be made in the country with the exception of the springs. In other words, the mineral industry of Japan is still at an early stage, a circumstance to which consideration will be given in connection with a survey of the import side of the foreign commerce.

Marine Products.—Marine products are exported exclusively to China, Hong Kong and Corea; the total value was 5,000,000 yen in 1899. Of a great many varieties of fish and sea-weeds exported the most important item is the cuttlefish, the annual export of which amounts generally to more than one million yen. The insular character of Japan doubtless affords opportunity for a great expansion of the fishing industry. The country has 17,000 miles of coast and 270,000 families engaged in fishing. They employ 330,000 boats and 1,194,000 nets,⁴⁸ representing a capital of about 30,000,000 yen. The total value of the catch was estimated at 39,000,000 yen in 1899, though the statistics on this subject are far from accurate, since there is direct export from the open sea to Corea without landing at the ports of Japan. Here, as elsewhere, there have been few improvements in method, and the primitive types of nets and hooks still survive. Greater care needs also to be taken in the process of curing and packing. The high repu-

⁴⁸ "Japan," in "Encyclopædia Britannica," new vol. 29.

tation of Japanese marine products and consequent increase of demand will depend not merely on the kind and quality of fish, but upon their mode of curing as well.

In this connection, special attention should be called to Hokkaido, the northernmost island and the Eldorado of Japan. Steady and even rapid as the increase of population has been in consequence of the energetic colonization policy of the government during the past thirty years, yet the number of inhabitants is still so small that there are only fifteen persons to the square mile, a number by no means adequate to the proper development of the immense resources of the island. The island yields annually a large quantity of marine products—herring, salmon, trout, sardines, pilchard, sea-weeds, otter and seal—the total value of which at present is much greater than that of the agricultural and mining products taken together. These fisheries, though of late years greatly developed, are yet far below the condition prevailing in the main island.

IMPORTS.

Japan's foreign trade may almost be regarded as an elaborate machine for supplying Japan with textiles and the raw material for making them. Of the 287,000,000 yen worth of goods imported, textile goods, wool and cotton, make up at least 117,000,000 yen, and food stuffs 53,000,000 yen; the remainder consists chiefly of metal manufactures. The principal articles of import can conveniently be divided into two classes—those which Japan cannot produce at the present time, and those for which Japan is advantageously dependent upon foreign supply, although capable of producing. In the first class are:

Cotton and woolen manufactures "	47,000,000	yen.
Cotton yarn.....	7,000,000	"
Wool	4,000,000	"
Iron and steel goods.....	38,000,000	"
Steamships, locomotives, engines and watches.....	6,000,000	"
Petroleum	14,000,000	"
Indigo and oil cake.....	10,000,000	"

" The chief articles among them are shirtings and cotton prints, mousseline, woolen and worsted cloths, cotton satins and velvets, and Italian cloths.

Again, these articles fall into two chief classes—textile manufactures and metal manufactures.

Textile Manufactures.—The Japanese textile industry suffered a sudden depression when the country was thrown open to foreign commerce. For several decades the home manufactures had to compete with the extraordinarily cheap cotton and wool stuffs of Manchester.⁴⁵

In spite of the progress made recently in the spinning industry, the import of cotton yarns still occupies a place in the front rank. All these are, however, the higher counts of Lancashire yarns. The Japanese spinners have hitherto devoted their attention to the coarser yarns, and since 1892 have completely driven the Indian yarns from the home market.⁴⁶ Attempts are being made by a few mills to spin an excellent quality of twist from Egyptian cotton and thus to check the importation of English yarns. Though their “gassing” and “finishing” at present leave something to be desired, there is no doubt that in time these defects will be successfully overcome.⁴⁷

The importation of woolen fabrics has increased from year to year with the growing spread of European fashions. Formerly woolen cloths were unknown to the Japanese, but at present even the conservative sex is adopting them, and the annual import of *mousseline de laine*, which is said to be an unsurpassed material for women’s dresses in a climate like that of Japan, is considerable.⁴⁸ The import of blankets for the use of the army and the navy, which at one time was large, has recently dwindled to a very small quantity, and the native factories now seem to be able to turn out a sufficient amount for home consumption. The woolen industry is new to Japan and the factories are still few in number,

⁴⁵ Rein, “Industries of Japan,” p. 381.

⁴⁶ J. Morris, “Japan and Its Trade,” p. 25.

⁴⁷ “British Consular Reports,” Annual Series, 1899.

⁴⁸ Morris, “Japan and Its Trade,” p. 43. In 1900, the import of this article amounted to 7,000,000 yen in value. For the purpose of supplying this demand three factories have been established since the termination of the war. The shops employ about 1000 operatives.

turning out only about 13 per cent⁴⁹ of the woolen goods used in the country. In the manufacture of woolen goods, as in the case of cotton, the progress thus far made has been in the lower grades of fabrics, such as blankets, traveling rugs, shawls, etc.⁵⁰

But the steady increase in the import of wool affords an excellent proof of the growth of the industry. Japan is, however, dependent on foreign countries for her entire supply of raw wool. Several attempts have been made by the government to introduce sheep rearing and breeding upon its experimental farms; but, owing to the peculiarities of the climate and pasturage of the country, such efforts have been almost invariably attended with failure.⁵¹ Hence, all the material is imported from China, Australia and Great Britain.

In view of these facts, our conclusions with respect to the importation of textiles are evident. In the first place, the import of raw material, both wool and cotton, will necessarily increase in a larger proportion with the growth of textile industry. Cotton is already being imported, not so much for home consumption, but largely to be exported in the form of yarns. As regards foreign cotton fabrics, the tendency will be rather to decline instead of increasing. Owing to the peculiarity of tastes, it has always been impossible for foreign manufactures to invade the Japanese market to any considerable extent. It has only been where uniformity and smoothness are demanded in fabrics that a combination of Western skill and capital has been successful in competition. For years past the import of cotton satins and velvets, shirtings and cotton prints has been on the steady increase; but it is not unlikely that at an early

⁴⁹ "U. S. Consular Reports," No. 225.

⁵⁰ Ibid., No. 224.

⁵¹ But Rein doubts the unfitness of the soil and says: "In view of the fact that sheep raising succeeds best in countries with a dry climate, the chief obstacle to it in Japan is more likely to be in damp atmosphere and frequent summer rain."—"Industries of Japan," p. 184.

day Japan will be able to produce these commodities. Attempts are lately being made by the government as well as by the public in general⁵² to adopt modern weaving machines. On the other hand, however, the import of woolen fabrics will probably continue to increase for a considerable period, since the woolen industry in Japan is in its incipient stage, and a long time will be required to train the workmen in technical knowledge and skill.

Metal Manufactures.—Among the varied iron manufactures which Japan imports, the chief articles are materials for railway and bridge construction, locomotive engines, the various kinds of machinery, and nails. Japan is dependent upon foreign countries for nearly her whole supply of such goods. There are at present no less than 1200 locomotives⁵³ in Japan, of which only fifteen⁵⁴ were made in the country, the remainder having been ordered from Great Britain, the United States, and to a less extent from Germany. Only a very small part of the rails in use have been furnished by the Government Iron Foundry.⁵⁵ One nail factory, founded in 1897, has grown to considerable dimensions; its present output amounts to about one-third of the quantity imported.⁵⁶

But in certain kinds of machinery the Japanese artisans, being quick to imitate, have taken advantage of the lack of

⁵² An expert from the Department of Agriculture and Commerce was recently sent to America, Lyons in France, and Zurich in Switzerland, to buy the weaving machines. All these machines were loaned to the model weaving factories and schools.—“Weaving Machinery for Japan,” in “U. S. Consular Reports,” May, 1903.

⁵³ “Progress of Japanese Railway Enterprises,” in “U. S. Consular Reports,” No. 269.

⁵⁵ “British Consular Reports,” Annual Series, 1900. “The first locomotive made in Japan ran on April 26, 1893, with perfect success, lowness in consumption of coal, good hauling capacity and steadiness, and the cost was cheapened.”

⁵⁶ “It commenced operations in 1900. Twelve Germans are employed and all the machinery for use there came from Germany. When completed it is expected to give employment to 1500 or 1600 workmen and to engage in the manufacture of rails and sheet iron.”—“British Consular Reports,” Annual Series, 1900.

⁵⁷ “Iron-nail Trade in Japan,” in “U. S. Consular Reports,” No. 225.

protection from foreign patents, and have succeeded in copying many mechanical appliances, often producing machines which, for a given work, excel any to be found in the world. The ship-building industry in Japan has made remarkable progress, and although the Japanese builders have enough to do for the present to meet the home demand, in the near future they will probably enter the world market as a young rival of the great ship-building concerns of the West.⁵⁷

There is no doubt that with the progress of the nation itself, the demand for various kinds of iron work will necessarily increase in a greater proportion than anything else. Thus, for example, over 2000 miles of railway are still under construction. Steel, which is the framework of modern industry, cannot yet be produced in the country satisfactorily, not to say sufficiently. One of the most important questions which the government encountered when it recently established an iron foundry (which so far has proved a failure) is the future supply of iron ore. Iron mines, believed to be rich,⁵⁸ are still imperfectly developed owing to the lack of capital and experience. For some time to come Japan will rely for the supply of ore upon the rich Hanyang iron mines of China.⁵⁹ Another difficulty is the lack of experience among the workmen. Japan has heretofore had no "industrial class" in the modern sense of the word, and a considerable length of time will necessarily be required for training the workmen and overcoming mechanical difficulties. Industrial success depends, not upon the skill of a few master workmen, but upon the technical knowledge, sense and energy of the common laborers. Viewed from

⁵⁷ "Shipbuilding in Japan," in "U. S. Consular Reports," No. 263.

⁵⁸ "Throughout Japan iron is found imbedded in granite and calcareous rocks. The total supply, visible in Rikuzen, Akita, and Echigo, is over 30,000,000 tons and fresh discoveries of ore are of daily occurrence."—"British Consular Reports," Annual Series, 1893.

⁵⁹ "Chinese Iron Ore for Japan," in "U. S. Consular Reports," No. 265.

these points, we can fairly conclude that the importation of metal manufactures will steadily increase year after year for a considerable period to come.

The import of petroleum is considerable, its production in Japan being limited.⁶⁰ The demand is lately increasing largely, not only for lighting and heating purposes, but for preserving cultivated areas from the ravages of insects, kerosene thus taking the place of camphor, which had been extensively used in this way from ancient times.⁶¹ Oil-cake and indigo are important articles of Japanese import. The former is the bean refuse left after the oil has been extracted from the beans grown in Manchuria, and is said to be an unequalled fertilizer. The dry indigo is nearly all supplied by British India, a small fraction being imported from Dutch India and the Philippine Islands.

Having thus reviewed the important articles which Japan cannot produce, we turn to a consideration of those commodities for the supply of which Japan is advantageously dependent upon foreign countries in spite of the fact that she could produce sufficient to meet the home demand. They are the following agricultural products:

Raw cotton.....	60,000,000 yen.
Sugar	27,000,000 "
Rice	9,000,000 "
Beans, peas, and pulse.....	5,000,000 "
Flour	4,000,000 "

Agricultural Products.—Cotton is widely cultivated throughout the middle and southern part of Japan. It is, however, not indigenous to Japan, but a stranger introduced from India by the votaries of the Buddhist religion many centuries ago. It is ill-suited to the soil of the country, the plant being dwarfish and the bolls being too small and weak to be spun by machine power.⁶²

⁶⁰ "Petroleum Production in Japan," in "U. S. Consular Reports," Nos. 237, 239.

⁶¹ Morris, "Japan and Its Trade," p. 30.

⁶² "Cotton in Japan," in "Transactions of Asiatic Society of Japan," vol. iv, p. 145.

It is in the cotton culture that the agricultural interests of Japan have suffered most severely from foreign competition. At present they are threatened with extinction by the large importations. In 1887, the cotton producing area of the country was 98,000,000 cho, which decreased to 33,000,000 cho in 1899, while the annual production of cotton shows a falling off of more than 400 per cent in the corresponding years, viz.: from 143,000,000 kin to 32,000,000 kin. The import of raw cotton must necessarily increase year after year with the growth of the spinning industry. British India from 1895 to 1900 was the main source of supply, but the United States then took first place. China had ceased to occupy the premier position in this respect in 1895. America always ranked high and occupied the second place in 1898, China then holding the third.

The importation of sugar is increasing as the standard of living advances, a phenomenon especially marked since the late war with China. The large consumption may be regarded as a sign of the prosperity of the country. The annual production of sugar in Japan, exclusive of Formosa, is reported as at little less than 4,000 tons, almost a negligible quantity compared with the 152,000 tons of raw sugar imported and 176,000 tons of refined.⁶³ The industry receives no direct aid from the government, and has been unfavorably affected by the bounty system in vogue in Europe.⁶⁴ It is mainly from Hong Kong that Japan draws its supplies of refined sugar, though Germany is a strong competitor; recently another extensive producer has entered the lists, viz.: Australia. According to an investigation recently made, the *per capita* consumption of sugar in Japan is only 8 pounds per annum, while in the United States it is 37 pounds, and in Europe 18 pounds. In view of these figures, it is likely that the demand in Japan will increase still further.⁶⁵

⁶³ "Sugar Refining in Japan," in "U. S. Consular Reports," No. 272.

⁶⁴ *Ibid.*

⁶⁵ "Sugar Trade in Japan," in "U. S. Consular Reports," No. 213.

The import of rice fluctuates violently according to the size of the domestic crop. The extraordinary increase in 1898 in the import of this staple, which amounted to 48,000,000 yen, was occasioned by a marked diminution in the crops for 1897. The abundance of the crop in the subsequent years, on the other hand, caused the import to fall to normal dimensions in 1900. There is annually an export of a small amount of Japanese rice to foreign countries, where it commands a comparatively high price on account of its superior quality. The increasing volume of this export is bound to occasion a corresponding import of a cheaper quality of the article from British India, Siam, Saigon and Corea. It appears, however, that of late years the Japanese crops, apart from this consideration, would scarcely have sufficed, under even the most favorable circumstances, to feed the rapidly increasing population.

Besides the articles just considered, peas, beans and flour are worthy of mention. Beans and peas are, for the most part, used in the manufacture of "soy," which is largely consumed by the people as a sauce, and also in the place of salt. The steady increase in the importation of foreign flour also must be not overlooked, since it indicates that Japan is more and more depending for its supply of food stuffs upon foreign countries.

Two forces are seriously affecting the agricultural conditions of the country. One of these is the rapidly increasing population. An allusion has already been made to the fact that Japan has almost reached the maximum in her production of rice,⁶⁶ and that of late years, even under the most favorable circumstances, the Japanese crops have not sufficed to feed the growing population without the impor-

⁶⁶ PRODUCTION OF CEREALS IN JAPAN.

Bushels.

Rice *	197,951,000
Wheat	20,288,000
Barley	42,036,000
Rye	33,030,000

* Second only to India in the production of this crop.

tation of foreign supplies. Every inch of the arable land of the country has been brought under cultivation by the labors of many centuries, and even the mountains are often cultivated to their highest summits, manure being laboriously carried up on human shoulders. Under these circumstances, there is at present no prospect for any large extension of cultivable soil with the exception of Hokkaido, the northernmost island of Japan, a great part of which still remains untouched. However primitive be his method of cultivation, the Japanese farmer understands his work so thoroughly that, by elaborate means of irrigation and the skilful use of fertilizers, he has been able to obtain rich harvests from the same land during fifteen or twenty centuries. It will thus be inferred that agrarian improvements in the direction of more scientific processes of intensive cultivation would hardly afford much relief, especially in view of the fact that the population of Japan is increasing at the rate of 400,000 souls per annum. It is quite evident that at no remote time Japan will be compelled to rely for her means of subsistence upon foreign lands.

Agriculture, however, is still the fundamental basis of Japan's industrial life. To this industry the country owes its ability to pay its way, and but for the peasant former, who, by a more or less cheerful acquiescence in the imposition of a land tax, made it practicable for the newly formed central government to carry on the task of administration on a Western model, it is difficult to see where the resources could have been found for the consummation of so vast a change as that which has occurred during the last thirty years. But lately there has been an important shifting from agriculture to the manufacturing industry. The Japanese farmers toil hard throughout the year, but their profits are small compared with those derived from other kinds of business.⁶⁷ This question has recently been much

⁶⁷ "According to statistics, the total debt of the farming class at present amounts to about 600,000,000 yen, two-thirds of which is the result of the easier life led by the generality of farmers, the better

discussed by a section of the public with the view of fostering the agricultural resources of the country, but it seems that there is no immediate and practicable means of improvement. The external force of foreign trade steadily works to make the country produce that for which it is most suited, and labor and capital is constantly shifting to more remunerative industries.

From the point of view of economy in purchasing food, we have reason as a nation to be glad that the farmers are constantly forsaking their holdings for other lines of business. Such a change indicates that there is an increase of employment in other occupations created largely by foreign demand, and also that the price of rice is falling through the importation of a cheaper foreign staple. The diminution in the cotton and sugar-growing areas in Japan is made up by the corresponding increase of the mulberry orchards. The result is a net gain to the country as a whole; work is applied in directions which give a greater return. According to an investigation recently made, Chinese rice can be bought at half the price at present prevailing in Japan, and but for the existence of the Chinese "corn law," which prohibits any exportation of rice, Japanese agriculture would have suffered much more rapidly and seriously. The competition of China, where vast tracts of land are still left uncultivated and where the price of rice is cheap, must be expected sooner or later, and then a serious fall in the price of Japanese rice will set in, causing a series of agricultural changes.

food, clothing and housing. This capital is unproductively employed, while the remaining 200,000,000 yen goes to the fund for the improvement of the agricultural industry. The interest paid by farmers is abnormally high, ranging from 15 to 30 per cent per annum, and there is little prospect of repayment, as the profits are small. . . . For this reason, the improvement of farms is entirely out of the question. The small tenant farmers are rapidly forsaking their holdings for other business, and tenant farmers in Hiroshima and Yamaguchi prefectures, where the agricultural land is largely owned by a few rich farmers, are steadily leaving for abroad."—"Agricultural Industry in Japan," in "U. S. Consular Reports," No. 269.

CHAPTER III.

GEOGRAPHICAL DISTRIBUTION OF TRADE.

CHANGE IN DISTRIBUTION.

It is only within comparatively recent years that the foreign commerce of Japan has become co-extensive with the world. Until about 1886, the trade of Japan was confined almost exclusively to five countries, viz.: England, United States, China, France and Germany. In the import trade, England led with 53 per cent in 1880; China followed with 15 per cent, and then came, in order, France and the United States with percentages respectively of 10 and 7, and finally Germany with 4 per cent. In the same year our exports to the United States constituted 42 per cent of the total; to China, France and England, respectively, 22 per cent, 19 per cent and 9 per cent, while our exports to Germany were insignificant.

The period 1869-1873 is characterized as the meridian of England's commercial prosperity and expansion in the nineteenth century. Up to the eighties, no other powers had entered into sharp competition with England in the Far Eastern trade. The United States was in a disadvantageous position, there being no direct transportation facilities prior to 1886. Hence, most of the commodities sent from the States to Japan came by way of the Suez Canal, taking sixty days. The conquest of the Japanese market by England was largely due to the pre-eminence of her merchant marine and to her unequalled banking facilities. As late as 1890, over one-half of Japan's foreign trade was carried on by English vessels. Englishmen obtained large contracts for internal improvements, such as railways.

Under these circumstances, it is quite natural that Japan's import trade up to about 1886 was chiefly with England. Japan exported tea and silk, the former exclusively to the United States, while some portion of the latter was sent to France, and our indebtedness to England and Germany thus discharged. For this reason the balance of trade with the United States and France was favorable.

Japanese trade might have been expected to begin with the Asiatic countries, but there were few commercial transactions with any of these countries except China during the period of which we are speaking. The prime cause was that very few Japanese ventured in commercial enterprises abroad, nearly the whole business of both export and import being carried on through the intermediary service of foreign merchants resident in the treaty ports. Our trade with the neighboring countries was established and handled by the Chinese. Without going into details, it will suffice to say that during the period under consideration not only was the volume of trade small, but also only a few commodities were traded in, the bulk of our exports consisting of tea and raw silk.

But with the last decade, there has been a remarkable change in Japanese economic life. Up to 1886, industrial Japan had busied itself in laying the foundation for the nation's material progress. The construction of railways, steamships and harbors, the establishment of postal and telegraphic communication, and the organization of joint stock companies—in short, the change from local to national economy—were the country's chief concerns. But when the internal affairs had been put in order, and the foreign markets had gradually become known, public attention turned more and more to the external side of commercial relations rather than to the domestic trade. Many new industries have thus sprung up one after another. From natural products to textile goods, and then to other forms of manufacture, is the line of evolution along which the foreign commerce of Japan has developed during the last decade.

The logical consequence of this is a change in the geographical distribution of trade.¹ The significant features of this transition are: (1) the relative decrease in Japan's imports from England; (2) the large increase in the German trade and (3) of American imports; and (4) the expansion of our market in Asiatic countries.

Without doubt England is losing her leading position.² The decrease from 53 per cent in 1880 to 24 per cent in 1900 is notable. If, however, merely the relative ratio is accepted as an index, the result will be misleading, for the total value of our imports from England increased from 19,000,000 yen to 71,000,000 yen in the corresponding years. Again, the recent rapid growth of our trade with the British possessions must also be taken into account. Yet it is a matter of fact that the wares of Manchester and Birmingham have to a large extent been superseded of late years. This is particularly true in iron and steel goods.

Japan's imports from Germany increased nearly 490 per cent within the last decade, that is, from 6,000,000 yen in 1890 to 29,000,000 yen in 1900.³ The share of Germany

¹ PERCENTAGE OF TOTAL IMPORTS.

Year.	China.	England.	France.	Germany.	U. S.	All the other.
1873	35	42	8	7	3	5
1880	15	53	10	4	7	11
1890	10	32	4	8	8	38
1900	10	24	2	10	21	33

PERCENTAGE OF TOTAL EXPORTS.

Year.	China.	England.	France.	Germany.	U. S.	All the other.
1873	22	23	16	..	19	20
1880	22	9	19	..	42	8
1890	9	9	14	..	35	33
1900	14	4	9	1	25	48

² "It is indeed true that the English have lost commerce relatively and even absolutely in a number of their possessions and protectorates, including Canada, Egypt, and even India."—Reinsch, "World Politics," p. 34. See Farrer, "Does Trade Follow the Flag," *Contemporary Review*, December, 1898.

³ For a comprehensive survey, see Reinsch, "World Politics," p. 281. In 1900, German interests in China and Japan are reported to be no less than \$90,000,000 in value. In Japan alone, there are 65 German warehouses doing business with an aggregate capital of \$5,000,000.

does not even yet amount to one-half that of England, but the German merchants are prosperous and energetic, and more and more of the English trade in Japan is passing into their hands.

The American imports have made the most remarkable increase. In 1895 the total value of Japan's imports from the United States was only 9,000,000 yen; in 1900 it had increased to the enormous sum of 62,000,000 yen. This rapid increase, however, is largely due to raw cotton, though the imports of manufactured goods also increased at a great pace. The entrance of American competition has been attributed to the industrial depression in the States after 1893. "The depression brought about an era of economy and stimulated the development of labor-saving machinery and appliances of every description, and by their adoption the American maker has been able not only to meet the lower prices offered to him by his own countrymen, but in many cases to create demand abroad by selling his surplus at cost price and thus freeing the home market from any excess. Another point is the development of the direct steamship lines from New York, whereas goods were formerly sent to Liverpool or London for transshipment to Japan."⁴ In case of large orders, the industrial capacity of a country to meet these orders in the prescribed time is sometimes more important than the prices quoted. It is perhaps in this matter of quick delivery more than anything else that the American manufacturers have a great advantage.

Next to be considered is the recent sudden increase of Japanese exports to the Asiatic countries.

VALUE OF EXPORTS FROM JAPAN TO ASIATIC COUNTRIES.

	1890	1900
Hong Kong.....	9,000,000 yen.	39,000,000 yen.
China	5,000,000 "	31,000,000 "
British India.....	500,000 "	8,000,000 "
Corea	1,000,000 "	9,000,000 "

German industrial enterprises in Japan are valued at \$3,000,000, and German interests in Formosa at \$1,500,000.—"German Commercial Interests in China and Japan," in "U. S. Consular Reports," No. 239.

⁴ "British Consular Reports," Annual Series, 1896.

It will be observed that the increase ranges from fourfold to sixteenfold. This increase has been primarily due to the industrial development of Japan. The hope had been entertained that these countries would prove excellent markets for Japan's surplus products, and success encouraged the hope that manufacture for export could become a source of national wealth. It is, indeed, in these markets that Japan has begun to compete successfully with European and American goods. Her geographical situation, together with the racial affinity and transport facilities, seem to afford advantages for the effectual fostering of permanent commercial relations.

PRESENT SITUATION.

It has recently been said that England's day in the East is over,⁵ and it has also been suggested to the American public that Japan might inundate the American market with cheap watches and bicycles.⁶ Of course, Japan may become a formidable, if not a successful, competitor one of these days. But the day is still distant. It is, therefore, essential to see how far and in what direction Japanese competition has heretofore been carried. In so doing, it will be convenient to group Japan's foreign commerce into the three grand divisions, viz.: Asia, Europe and America.

The following table shows the present distribution of Japan's Asiatic trade:

⁵ "Correspondents of the leading London journals have done so, and an Australian statesman, who recently visited Japan with the special purpose of enquiring into her commercial and industrial prospects, did not hesitate to say in conversation that England's day as a manufacturer for the Far East, if not even for Australia, was over, and that she must be prepared to give way all along the line to her rising rival."—"British Consular Reports," Annual Series, 1896.

⁶ "General Survey of the World's Commerce in 1900," in "U. S. Consular Reports"; see R. P. Porter, "Is Japanese Competition a Myth?" in North American Review, No. 163, 1896; B. Moses, "Economic Situation in Japan," in Journal of Political Economy, No. 6, 1896.

	Exports (yen).	Imports (yen).
✓China	31,372,000	29,961,000
✓Hong Kong	39,177,000	10,660,000
British India	8,704,000	23,576,000
✓Corea	9,953,000	8,806,000
All the rest ⁷	5,312,000	16,857,000
Total.....	95,018,000	89,860,000

The table shows an adverse balance of trade with British India, and with the countries grouped in the last class, while the trade with Hong Kong shows an exceedingly favorable balance. With the exception of China and Hong Kong our trade with Asiatic countries is still of small amount.

The unfavorable balance of trade with British India is chiefly due to imports of raw cotton, that with the Philippine Islands to imports of hemp and sugar, and that with French India to imports of rice, while the exceedingly favorable conditions of trade with Hong Kong is mainly owing to our exportation of cotton yarns, coal, copper and matches. Thus, speaking roughly, our commercial relation with Asiatic countries is that of a manufacturing country with producers of food supplies and raw materials.

Japan is striving, pressed by the rapidly increasing population, to secure a means of livelihood through industrial development. Except with China and Hong Kong our trade in manufacturing goods is still small, and the process of transforming Japan into a manufacturing country is in an early stage. Japan exports two classes of manufactures: (1) such articles as Japan manufactures for her own use, and (2) articles imitated from foreign patterns and design, which are already in demand in Asiatic countries. Among those semi-civilized peoples who are satisfied with cheap and inferior commodities, it will not be difficult to attain that commercial supremacy which is the avowed ambition of Japan.

⁷ Russian Asia, Anam and other French India, Philippine Islands, and Siam.

Japan's commercial relations with European countries stand at present as follows:

	Exports (yen).	Imports (yen).
Great Britain.....	11,262,000	71,638,000
Germany	3,556,000	29,200,000
France	19,150,000	8,095,000
Belgium	297,000	7,949,000
Italy	7,129,000	450,000
All the rest.....	1,456,000	9,062,000
	<hr/> 42,853,000	<hr/> 126,393,000

Two points are noteworthy: (1) the great excess of imports over exports; and (2) the favorable balance of trade with France and Italy. The former is due to our large importations of cotton and woolen fabrics, and iron manufactures, while the latter is owing to our exports of raw silk. Numerous foundries are lately actively at work in many parts of the country, and the Japanese are becoming independent of foreign countries in the matter of the simpler forms of machinery. Some of the leading men of Japan already foresee the time when Japan will supply the markets of Europe with articles of European type, but such a consideration is, for the present, out of the question. Japan's exports to the more civilized countries of Europe and America have uniformly consisted of highly specialized products, such as silk, tea, artistic manufactures, and articles requiring great expertness of fingers. Where artistic skill and hand labor play a large part, Japan has always been successful in competition in European markets. It will be in these lines of commodities that immediate expansion of trade in the Western markets is to be expected while our imports of iron manufactures will increase steadily with the progress of the nation.

The following table shows the present condition of our trade with America:

	Exports (yen).	Imports (yen).
The United States.....	52,566,000	62,761,000
All the other American countries.....	2,987,000	329,000
	<hr/> 55,553,000	<hr/> 63,090,000

Until 1899, the balance of trade with the United States was always favorable, but since then Japan imports more therefrom than it exports thereto. The principal articles which we import from the United States are raw cotton, iron manufactures, flour, etc., while the chief articles of our exports are raw silk, silk fabrics, tea and floor matting.

It will thus be observed that the commercial relations of Japan with Asia, Europe and America differ in character. Speaking generally, the export trade of Japan with Europe and America consists of special products, while that with Asia consists chiefly of those commodities which were at one time an important item in Japan's imports, such as cotton yarns, matches, umbrellas, etc. Japan is still dependent for the supply of the various kinds of modern manufactures on Europe and America, and especially for a supply of machinery, while she is dependent for her supply of raw materials and food stuffs on Asia, and, to a great extent, on the United States.

Further changes in Japan's commercial relations will depend upon the industrial development of the country. During the last decade, the trade from European countries has been decreasing, relatively, while the imports from the United States show a remarkable increase. It is, however, in the trade with Asiatic countries that the most remarkable feature presents itself, and the tide of Japanese commerce now seems to move more and more towards the eastern shores of continental Asia, namely, to Russian Asia, Corea, China, Hong King, British India and the Straits Settlements.

CONCLUSION.

The growth of our foreign commerce has had such vast and intricate effects on every phase of our political, social and individual life that it is difficult to sum them up. The effect on individual welfare is sufficiently obvious—we owe to foreign trade not only the varieties of goods which we import from different countries, but also the cheapness

of prices. Every article of foreign growth and manufacture is at a lower price or of a better quality than the Japanese produce when offered for sale, and we are gaining in all those commodities the whole difference between the Japanese and foreign prices. Take rice, for example. Formerly a sudden rise or fall in the value of rice occurred simultaneously with every change in the season's prospects to the great detriment of the laboring classes throughout the country. But the importation of foreign rice is nowadays acting as a regulating factor on the price of the commodity in the home market. The facility with which it can be had from neighboring countries has proved an immense boon to the poor, who no longer go in fear of a rice famine. Another advantage consists in the greatly increased variety of commodities procurable. We can buy spices from India, sugar from Hong Kong and the Philippines, coffee from South America; we can have the fruit and wine of every country, and metals from any mine in the world.

The effect of trade on the nation as a whole has been far-reaching. Only by the aid of foreign commerce has the consummation of such vast changes as Japan has undergone during the last thirty years been possible. The old sloth and inaction has vanished under the invasion of new ideas. Every opening of a market has given stimulus to the enlargement of business and industry. Manufactures need and find purchasers not only at home, but in foreign markets all over the world, and thus we notice that in the progress of commerce itself there is an ever-extending field for industries that had no existence before. Meanwhile, manufacture is found so profitable that Japan is beginning to rely for food on the countries by which she is surrounded. During the last two decades this process has steadily been going on. Japan cannot hope to compete in agricultural productions with those countries which have immense territory. Hence, Japan must rely on industrial development rather than on agriculture, and must strive to excel in the quality of goods produced rather than in quantity. The examples of Egypt

with its cotton, Italy with its rice, France with its silk, and England with its wool and sheep may well be cited as cases of countries the limited area of which does not allow them to compete with vast countries in the quantity of agricultural productions, but which in the quality of their respective staples distance all competitors. Japan possesses all the advantages necessary to make her a great manufacturing country. Her people possess exceptional skill, and labor is relatively cheap; coal is abundant, and the raw material is easily obtainable either at home or in the neighboring countries. Japan has supplied the more civilized countries with such articles as Japan naturally excels in, and the less civilized countries with the commodities that are now supplied by foreign countries, but which the adoption by Japan of foreign methods and machinery is enabling her to produce more cheaply.

We are at the very beginning of beginnings. While the commercial expansion during the past decade has proceeded with astonishing rapidity, only a very small fraction, about 1.7 per cent,⁸ of Japanese labor and capital is invested in the carrying on of foreign trade.

⁸ The present annual income of Japan is estimated at 1,463,000,000 yen, of which 25,000,000 yen is the profits of foreign trade.—“Japan,” in “Encyclopædia Britannica.”

